

1871.

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1889.

ILLUSTRATED CATALOGUE

—AND—

PRICE LIST

—OF THE—

THOMPSON MANUFACTURING CO.,

MANUFACTURERS AND DEALERS IN

CORRUGATED IRON,
CRIMPED IRON, BEADED IRON,
DOUBLE CAP IRON, ROLL CAP IRON,
IRON RIDGE ROLL AND RIDGING,
IRON FRAME BUILDINGS,
IRON TRUSS ROOFS.
GALVANIZED IRON GUTTERS, ETC.

OFFICE AND WORKS:

FOOT OF WAVERLY AVE., ON L. S. & M. S. R'Y,

CLEVELAND, OHIO.

SEPTEMBER, 1889.

SECOND EDITION.

HATCH PRINTING COMPANY,
32 S. WATER ST.,
CLEVELAND, - OHIO.

+ TDCAT 1889

#PAPV03B743

PAST AND PRESENT CAPACITY.

When this business was established in February, 1871, our plant consisted of two small hand machines for manufacturing Thatcher's Metallic Shingles, (the only kind of roofing made by us then.) These two machines operated by two men had a capacity of 20 squares per day of 10 hours. Now we have in successful operation and run by steam power machines of our own invention with a capacity of 1550 squares every 10 hours as follows:

| | | | | |
|-----------------------------|---|---|---|--------------|
| Three Corrugating Machines, | - | - | - | 750 squares. |
| One Double Cap | " | - | - | 300 " |
| One Crimping | " | - | - | 300 " |
| One Beading | " | - | - | 200 " |
| Total | - | - | - | 1550 |

In addition to the above, we have lately added machinery of the most approved forms for the manufacture of Roll Cap Roofing with a capacity of 200 squares per day, making the total capacity of our machinery 1750 squares per day.

We also have in operation two curving machines for curving Corrugated Iron, enabling us to give dispatch to this class of orders.

In 1871 the average per day of 10 hours to each man was 10 squares. Now the average is 50 squares per day of 10 hours to each man. This extraordinary reduction in the cost of manufacturing, in connection with the largely increased capacity of our plant, is what has enabled us to give our customers the benefit of LOW PRICES and GOOD GOODS. The large increase of our sales every year we attribute to the fact that during the past eighteen years we have made it a *point* to use *good iron*; see that it is manufactured and shipped in *good shape*, and that it was *just what we said it was*. We are satisfied with the *result*, and propose to "fight it out on that line" if it takes eighteen years more.

Don't buy until you thoroughly investigate our prices and goods.

Yours truly

THOMPSON MANUFACTURING CO.

GAUGES OF IRON.

The following tables show three different gauges of Sheet Iron, and the difference per square foot flat of the different numbers.

STANDARD GAUGE.

| No. of Gauge..... | 16 | 18 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
|---------------------|------|------|------|------|------|------|----|-----|-----|-----|-----|
| Weight in Pounds... | 2.50 | 1.86 | 1.54 | 1.40 | 1.25 | 1.13 | 1. | .90 | .80 | .72 | .64 |

BIRMINGHAM WIRE GAUGE.

| No. of Gauge..... | 16 | 18 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
|---------------------|------|------|------|------|------|----|-----|-----|-----|-----|-----|
| Weight in Pounds... | 2.62 | 1.98 | 1.40 | 1.29 | 1.13 | 1. | .88 | .80 | .72 | .64 | .56 |

AMERICAN GAUGE.

| No. of Gauge..... | 16 | 18 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
|---------------------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|
| Weight in Pounds... | 2.05 | 1.63 | 1.29 | 1.15 | 1.02 | .91 | .81 | .72 | .64 | .57 | .51 |

The standard Gauge is the gauge used in rolling sheet iron by almost all of the sheet mills in the United States. A very few mills roll by the Birmingham, and none so far as we are aware are rolling sheet iron by the American Gauge. From 1871 to 1885 all our quotations were based on Standard Gauge weights. At the latter date in order to meet the competition on prices made by other firms in our line who are quoting prices based on the Birmingham and American Gauges, we adopted the Birmingham Gauge. We are now confident that we made a mistake, as we are satisfied that the trade in general as well as consumers prefer the Standard Gauge in use by sheet mills. In making up our price lists in this catalogue we have made all prices based on the Standard Gauge weights, and we think our lists are made up so plain that every one can tell just what weights and gauges they want.

The National Iron Roofing Association, at a meeting, held in Cincinnati, Ohio, March 22 and 23, 1887, (and reaffirmed by them, at their meetings, held in the same city, January 17, 1888, and January 8, 1889,) established what we consider an arbitrary system of weights and measurements.

Do not confound our Standard Gauge with what they call Standard Roofing Gauge—Standard No. 26, Standard No. 24, &c.,—Standard Roofing Gauge is No. 28 Standard Gauge, and the weight of No. 27 and No. 25 Standard Gauge is equal to what they call Standard No. 26 and Standard No. 24 respectively.

In our judgment too much light iron is being used for Roofing and Siding purposes. Where Corrugated Iron is used for Roofing or Siding on sheathing boards, No. 27 Standard Gauge is the lightest gauge that should be used and No. 26 Standard Gauge is better; and where Corrugated Iron is used as roofing on purlins nothing lighter than No. 22 Standard Gauge should be used, and No. 20 is preferable; and when used as siding on studding or girts nothing lighter than No. 24 Standard Gauge should be used. We believe this matter is worthy the consideration of both the trade and consumers.

CORRUGATED IRON.

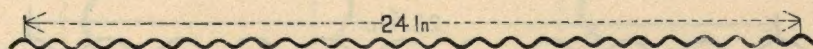
READ THIS CAREFULLY.

When asking quotations on, or ordering Corrugated Iron, please note that the following are all the sizes, widths and lengths we manufacture :

1 x $\frac{1}{4}$ inch Corrugation.

Extreme covering width of sheets 24 inches as shown by

FIG. 1

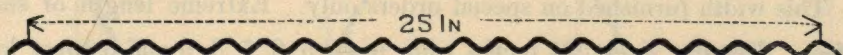


Extreme length of sheets 8 feet. We can furnish on special orders, sheets to cover 18, 20 or 22 inches wide, and any length up to 8 feet. Regular sizes 24 inches wide by 4, 5, 6, 7 and 8 feet long.

1 $\frac{1}{4}$ x $\frac{3}{8}$ inch Corrugation.

Regular covering width of sheets 25 inches, as shown by

FIG. 2.



Extreme length of sheets 10 feet.

Extreme covering widths of sheets, and furnished on special orders only, as shown by figures 3 and 4.

FIG. 3.

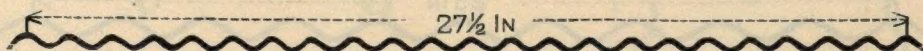
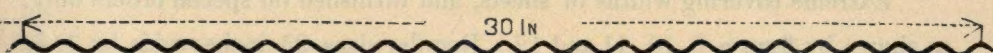


FIG. 4.

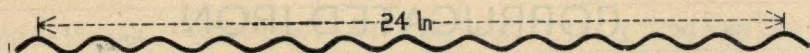


Regular sizes 25 inches wide by 4, 5, 6, 7, 8, 9 and 10 feet long.

$2 \times \frac{7}{16}$ inch Corrugation.

Extreme covering width of sheets 24 inches, as shown by

FIG. 5.

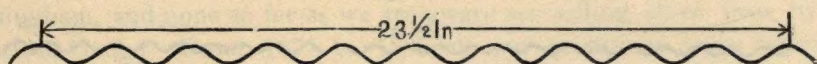


Extreme length of sheets 10 feet. We can furnish on special orders sheets to cover 18, 20 or 22 inches wide, and any length up to 10 feet. Regular sizes 24 inches wide by 4, 5, 6, 7, 8, 9 and 10 feet long.

$2\frac{3}{8} \times \frac{9}{16}$ inch Corrugation.

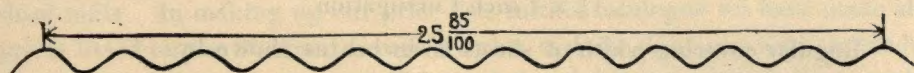
Regular covering width of sheets $23\frac{1}{2}$ inches, as shown by

FIG. 6.



Extreme covering width of sheets $25\frac{85}{100}$ inches as shown by

FIG. 7.

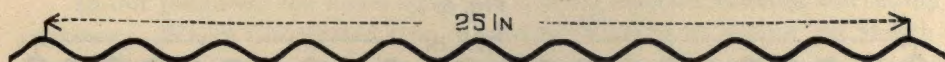


This width furnished on special orders only. Extreme length of sheets 10 feet. Regular sizes $23\frac{1}{2}$ inches wide by 4, 5, 6, 7, 8, 9 and 10 feet long.

$2\frac{1}{2} \times \frac{5}{8}$ inch Corrugation.

Regular covering width of sheets, 25 inches as shown by

FIG. 8.



Extreme length of sheets, 10 feet.

Extreme covering widths of sheets, and furnished on special orders only, as shown by figures 9, 10, 11 and 12. Regular sizes 25 inches wide by 4, 5, 6, 7, 8, 9 and 10 feet long.

FIG. 9.

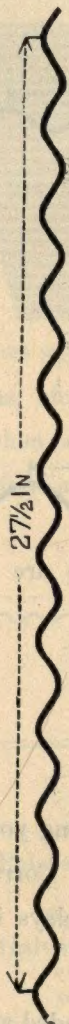


FIG. 10.

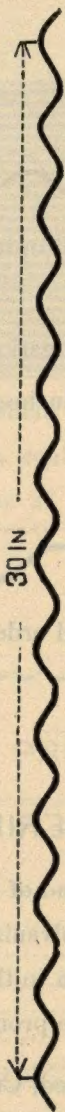


FIG. 11.

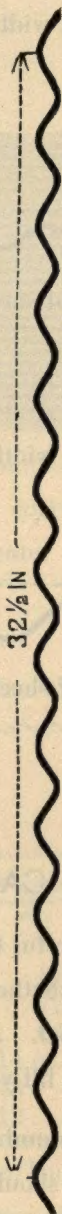
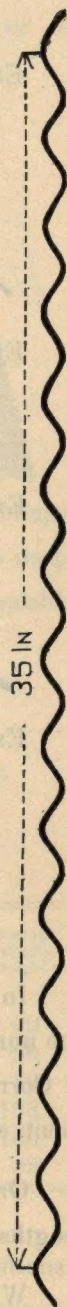


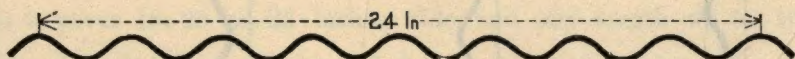
FIG. 12.



3 x $\frac{11}{16}$ inch Corrugation.

Extreme covering width of sheets 24 inches, as shown by

FIG. 13.

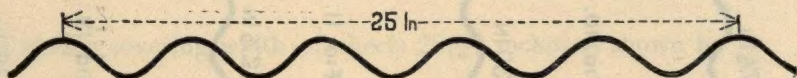


Extreme length of sheets 10 feet. All orders for this size are special.

5 x $1\frac{1}{8}$ inch Corrugation.

Extreme covering width of sheets, 25 inches, as shown by

FIG. 14.



Extreme length of sheets 10 feet. All orders for this size are special.

CARE IN ORDERING.

In ordering be careful to state what kind of Roofing or Siding you want; the number of Iron, whether painted or galvanized; the size of Corrugate—if Corrugated is ordered. A little attention to this may save delays in shipment, and enable us to fill your orders more prompt.

Orders for heavy numbers of Corrugated, Crimped and Beaded and odd lengths of all numbers should be sent in three or four weeks before wanted.

WHERE SPECIAL SIZES ARE CUT FROM STOCK WE CHARGE FOR WASTE AND TIME CUTTING.

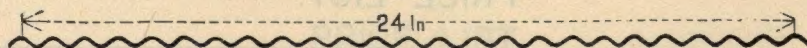
We desire to call your attention to the following illustrations of Corrugated Sheet Iron for Roofs, Sides, Ceilings and Partitions for Fire Proof Buildings. Corrugated sheets can be applied on Sheathing or on Wood or Iron Rafters or Purlins without sheathing.

FIG 15



Shows straight sheet of small corrugations suitable for Sidings, Ceilings, Partitions, etc., 1 inch from center to center of corrugations, $\frac{1}{4}$ inch deep. Sheets when corrugated cover 24 inches from center to center of outside corrugations as shown by

FIG. 16.



PRICE LIST.

| Gauge. | Per Square. | Weight per square foot flat. | Weight per 10 square feet corrugated. | Average shipping weight. |
|--------------------------|-------------|------------------------------|---------------------------------------|--------------------------|
| No. 26, Painted Red..... | \$4.60 | .80 | 94 | 99 |
| No. 27, " " | 4.25 | .72 | 84 | 89 |
| No. 28, " " | 4.10 | .64 | 75 | 80 |
| No. 26, Galvanized..... | 6.55 | 14 oz. | 103 | 108 |
| No. 27, " " | 6.40 | 13 | 95 | 100 |
| No. 28, " " | 6.30 | 12 | 87 | 92 |

Above quotations are for regular widths and lengths.

Sheets cover 24 inches wide from center to center of outside corrugations.

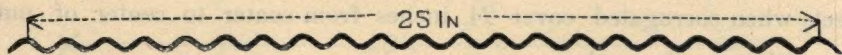
Regular lengths 4, 5, 6, 7 and 8 feet. One square consists of $6\frac{1}{4}$ sheets, 24 by 96 inches or equivalent. Price includes $\frac{3}{4}$ pound $1\frac{1}{4}$ inch No. 10 barb wire nails and $1\frac{1}{2}$ pounds dry paint per square.

FIG. 17.



Shows straight sheet of medium small corrugations suitable for Siding, Ceilings, Partitions, etc., $1\frac{1}{4}$ inch from center to center of corrugations, $\frac{3}{8}$ inch deep. Sheets when corrugated cover 25 inches from center to center of outside corrugations as shown by

FIG. 18.



PRICE LIST.

| Gauge. | Per Square. | Weight per square foot flat. | Weight per 100 square feet corrugated. | Average shipping weight. |
|--------------------------|-------------|------------------------------|--|--------------------------|
| No. 24, Painted Red..... | \$5.40 | 1.00 | 119 | 124 |
| No. 26, " " | 4.40 | .80 | 95 | 100 |
| No. 27, " " | 4.10 | .72 | 85 | 90 |
| No. 28, " " | 3.95 | .64 | 76 | 81 |
| No. 24, Galvanized..... | 7.55 | 16 oz. | 119 | 119 |
| No. 26, " | 6.50 | 14 | 104 | 104 |
| No. 27, " | 6.35 | 13 | 96 | 96 |
| No. 28, " | 6.25 | 12 | 88 | 88 |

Above quotations are for regular widths and lengths.

Sheets cover 25 inches from center to center of outside corrugations.

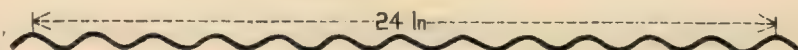
Regular lengths 4, 5, 6, 7, 8, 9 and 10 feet. One square consists of 6 sheets 24 by 96 inches or equivalent. Price includes 1 pound $1\frac{1}{2}$ inch No. 9 barb wire nails on No. 24, and $\frac{3}{4}$ pound $1\frac{1}{4}$ inch No. 10 barb wire nails on balance of gauges, and $1\frac{1}{2}$ pounds dry ore paint per square.

FIG. 19.



Shows straight sheet of Medium Corrugations suitable for Roofing when laid on Sheathing or Slats, also for Siding, Awnings, Ceilings and Partitions —2 inches from center to center of corrugations, $\frac{7}{16}$ inch deep, 24 inches from center to center of outside corrugations as shown by

FIG. 20.



PRICE LIST.

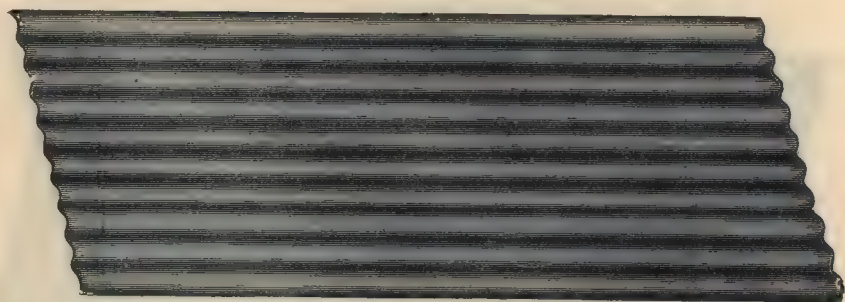
| Gauge. | Per square. | Weight per square foot flat. | Weight per 100 square feet corrugated. | Average shipping weight. |
|--------------------------|-------------|------------------------------|--|--------------------------|
| No. 24, Painted Red..... | \$5.00 | 1.00 | 119 | 125 |
| No. 26, " " | 4.40 | .80 | 95 | 100 |
| No. 27, " " | 4.10 | .72 | 85 | 90 |
| No. 28, " " | 3.95 | .64 | 76 | 81 |
| No. 24, Galvanized..... | 7.50 | 16 oz. | 119 | 119 |
| No. 26, " | 6.45 | 14 | 104 | 104 |
| No. 27, " | 6.30 | 13 | 96 | 96 |
| No. 28, " | 6.20 | 12 | 88 | 88 |

Above quotations are for regular widths and lengths.

Sheets cover 24 inches wide from center to center of outside corrugations.

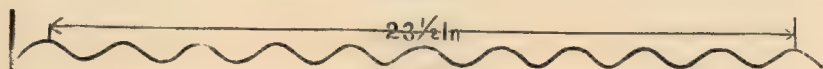
Regular lengths 4, 5, 6, 7, 8, 9 and 10 feet. One square consists of $6\frac{1}{2}$ sheets 24 by 96 inches or equivalent. Price includes $1\frac{1}{4}$ pounds $1\frac{1}{4}$ inch No. 9 wire barb nails, and $1\frac{1}{2}$ pounds dry ore paint per square.

FIG. 21.



Shows straight sheet of second size medium corrugations, suitable for all kinds of Roofing, Siding and curved ceilings, where strength is necessary. $2\frac{3}{8}$ inches from center to center of corrugations, $\frac{9}{16}$ inch deep, $23\frac{1}{2}$ inches from center to center of outside corrugations as shown by

FIG. 22.



PRICE LIST.

| Gauge. | Per square. | Weight per square foot flat. | Weight per 100 square feet corrugated. | Average shipping weight. |
|--------------------------|-------------|------------------------------|--|--------------------------|
| No. 20, Painted Red..... | \$6.90 | 1.54 | 185 | 185 |
| No. 22, " " | 6.00 | 1.25 | 150 | 150 |
| No. 24, " " | 5.15 | 1.00 | 120 | 120 |
| No. 26, " " | 4.50 | .80 | 96 | 100 |
| No. 27, " " | 4.15 | .72 | 86 | 90 |
| No. 28, " " | 4.10 | .64 | 77 | 80 |
| No. 20, Galvanized... .. | 10.15 | 25 oz. | 190 | 190 |
| No. 22, " | 8.85 | 20 | 151 | 151 |
| No. 24, " | 7.60 | 16 | 120 | 120 |
| No. 26, " | 6.60 | 14 | 105 | 105 |
| No. 27, " | 6.50 | 13 | 97 | 97 |
| No. 28, " | 6.35 | 12 | 89 | 89 |

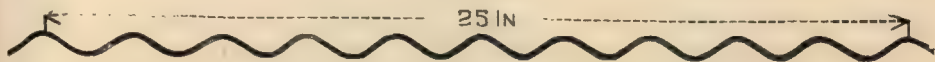
Above quotations are for regular widths and lengths. Sheets cover $23\frac{1}{2}$ inches from center to center of outside corrugations. Regular lengths 4, 5, 6, 7, 8, 9 and 10 feet. One square consists of $6\frac{3}{8}$ sheets $23\frac{1}{2}$ by 96 inches or equivalent. Price includes on Nos. 20, 21 and 22, $1\frac{3}{4}$ pounds $2\frac{1}{2}$ inch No. 7 barb wire nails, on balance of gauges $1\frac{1}{4}$ pounds 2 inch No. 9 barb wire nails, and $1\frac{1}{2}$ pounds dry paint per square.

FIG. 23.



Shows straight sheet of third size medium corrugations, suitable for all kinds of Roofing, Siding and curved ceilings where strength is necessary. $2\frac{1}{2}$ inches from center to center of corrugations, $\frac{5}{8}$ inch deep, 25 inches from center to center of outside corrugations as shown by

FIG. 24.



PRICE LIST.

| Gauge. | Per square. | Weight per square foot flat. | Weight per 100 square feet corrugated. | Average shipping weight. |
|--------------------------|-------------|------------------------------|--|--------------------------|
| No. 18, Painted Red..... | \$8.80 | 1.86 | 225 | 225 |
| No. 20, " "..... | 6.90 | 1.54 | 185 | 185 |
| No. 22, " "..... | 6.00 | 1.25 | 150 | 150 |
| No. 24, " "..... | 5.15 | 1.00 | 120 | 120 |
| No. 26, " "..... | 4.50 | .80 | 96 | 100 |
| No. 27, " "..... | 4.15 | .72 | 86 | 90 |
| No. 28, " "..... | 4.10 | .64 | 77 | 80 |
| No. 20, Galvanized..... | 10.15 | 25 oz. | 190 | 190 |
| No. 22, "..... | 8.85 | 20 | 151 | 151 |
| No. 24, "..... | 7.60 | 16 | 120 | 120 |
| No. 26, "..... | 6.60 | 14 | 105 | 105 |
| No. 27, "..... | 6.50 | 13 | 97 | 97 |
| No. 28, "..... | 6.35 | 12 | 89 | 89 |

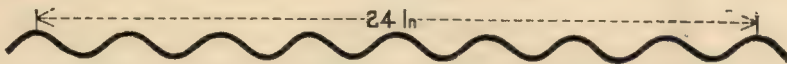
Above quotations are for regular widths and lengths. Sheets cover 25 inches from center to center of outside corrugations. Regular lengths 4, 5, 6, 7, 8, 9 and 10 feet. One square consists of 6 sheets 25 by 96 inches or equivalent. Price includes on Nos. 20, 21 and 22, $1\frac{3}{4}$ pounds $2\frac{1}{2}$ inch No. 7 barb wire nails, on balance of gauges $1\frac{1}{4}$ pounds 2 inch No. 9 barb wire nails, and $1\frac{1}{4}$ pounds dry paint per square.

FIG 25.



Shows straight sheet of large corrugation suitable for same purpose as Fig. 5. 3 inches from center to center of corrugations, $\frac{11}{16}$ inch deep, 24 inches from center to center of outside corrugations as shown by

FIG. 26.

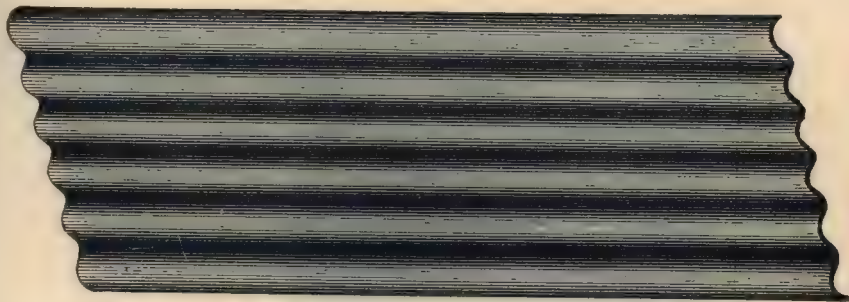


PRICE LIST.

| Gauge. | Per square. | Weight per square foot flat. | Weight per 100 square feet corrugated. | Average shipping weight. |
|---------------------------|-------------|------------------------------|--|--------------------------|
| No. 20, Painted Red | \$7.00 | 1.54 | 187 | 187 |
| No. 22, " " | 6.05 | 1.25 | 151 | 151 |
| No. 24, " " | 5.20 | 1.00 | 120 | 121 |
| No. 26, " " | 4.55 | .80 | 96 | 100 |
| No. 20, Galvanized | 10.25 | 25 oz. | 190 | 190 |
| No. 22, " | 8.95 | 20 | 151 | 151 |
| No. 24, " | 7.55 | 16 | 120 | 120 |
| No. 26, " | 6.65 | 14 | 96 | 96 |

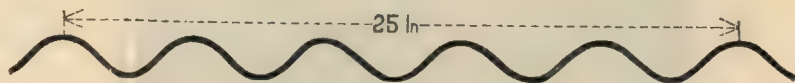
Above quotations are for regular widths and lengths. Sheets cover 24 inches wide from center to center of outside corrugations. Regular lengths 5, 6, 7, 8, 9 and 10 feet. One square consists of $6\frac{1}{4}$ sheets 24 by 96 inches or equivalent. Price includes on Nos. 20, 21 and 22, $1\frac{3}{4}$ pounds $2\frac{1}{2}$ inch No. 7 barb wire nails, on balance of gauges $1\frac{1}{4}$ pounds 2 inch No. 9 barb wire nails, and $1\frac{1}{2}$ pounds dry paint per square.

FIG. 27.



Shows straight sheet of extra large corrugations suitable for Roofs and Ceilings both straight and curved where strength is required to carry heavy loads. 5 inches from center to center of corrugations, $1\frac{1}{8}$ inches deep, 25 inches from center to center of outside corrugations, as shown by

FIG. 28.



PRICE LIST.

| Gauge. | Per square. | Weight per square foot flat. | Weight per 100 square feet corrugated. | Average shipping weight. |
|--------------------------|-------------|------------------------------|--|--------------------------|
| No. 16, Painted Red..... | \$10.60 | 2.50 | 310 | 310 |
| No. 18, " " | 8.95 | 1.86 | 230 | 230 |
| No. 20, " " | 7.10 | 1.54 | 190 | 190 |
| No. 22, " " | 6.15 | 1.25 | 155 | 155 |

Galvanized special price on application.

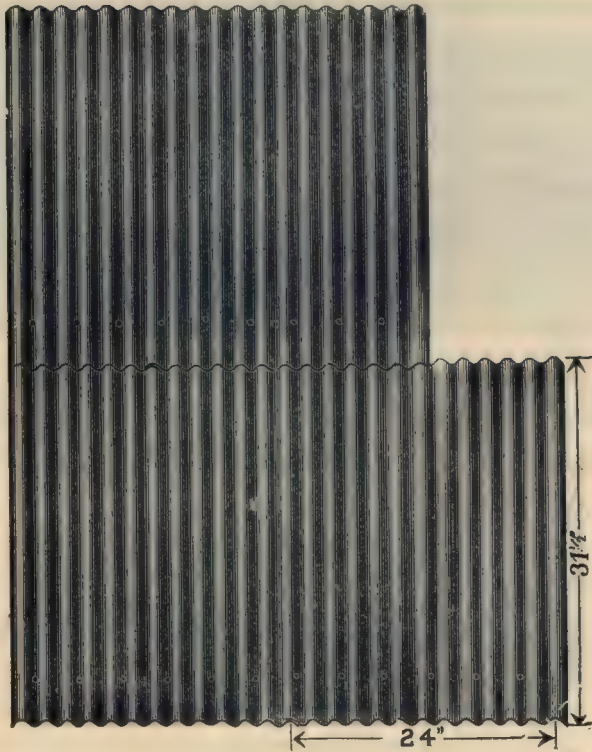
Sheets cover 25 inches wide from center to center of outside corrugations.

Extreme length 10 feet.

One square consists of 6 sheets 25 by 96 inches or equivalent. Price includes $1\frac{3}{4}$ pounds $2\frac{1}{2}$ inch No. 7 barb wire nails, and $1\frac{1}{2}$ pounds dry paint per square.

For Clips, Bolts and Rivets on Iron Truss Roofs, add 30 cents per square. We make no allowance in measurements for end laps. For roofing, sheets should have 4 inches end lap on Wood Rafters or Boarding, and 6 inches end lap on Iron Truss Roofs. For Siding 1 to 2 inches lap at ends of sheets.

FIG. 29.



Shows our style of corrugated Iron Siding for Grain Elevators. Corrugations same size as shown in Fig. 19. This mode of applying originated with us, and that it has proven satisfactory is shown by the fact that it has been very generally adopted all over the United States as the most complete Fire Proof covering for Grain Elevators in use.

The sheets are laid in such a manner that the elevator sides have a chance to settle without disturbing the fastenings of the sheets. Sheets are 24 inches wide by $31\frac{1}{2}$ inches long, and every other corrugate is punched for nails 3 inches from lower edge. The sheets are laid with $1\frac{1}{2}$ inch lap, and the nails are $1\frac{1}{2}$ inches above the upper edge of lower sheet, thus allowing the sheet to slip $1\frac{1}{2}$ inches in every $31\frac{1}{2}$ inches as the sides of the elevator settle. It is also used largely as a fire proof siding on every kind of buildings with board or plank sides, as the size of the sheet makes it much more convenient to handle on a scaffold than sheets 6 to 10 feet in length.

PRICE LIST.

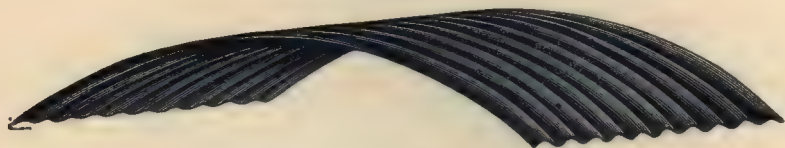
CORRUGATED IRON SIDING.

| Gauge. | Per square. | Weight per square foot flat. | Weight per 100 square feet corrugated. | Average shipping weight. |
|--------------------------|-------------|------------------------------|--|--------------------------|
| No. 24, Painted Red..... | \$5.10 | 1.00 | 120 | 120 |
| No. 26, " " | 4.50 | .80 | 94 | 100 |
| No. 27, " " | 4.20 | .72 | 82 | 90 |
| No. 28, " " | 4.10 | .64 | 75 | 80 |
| No. 24, Galvanized..... | 7.65 | 16 oz. | 120 | 120 |
| No. 26, " | 6.45 | 14 | 104 | 104 |
| No. 27, " | 6.40 | 13 | 96 | 96 |
| No. 28, " | 6.30 | 12 | 88 | 88 |

Sheets cover 24 inches wide, and are $31\frac{1}{2}$ inches long, and every other corrugation is punched for nails 3 inches from lower edge of sheets. One square consists of $19\frac{1}{4}$ sheets 24 by $31\frac{1}{2}$ inches. Price includes on Nos. 24 $2\frac{1}{2}$ pounds 2 inch No. 7 barb wire nails, on Nos. 26 and 27 $1\frac{1}{4}$ pounds 2 inch No. 9 barb wire nails and $1\frac{1}{2}$ pounds dry paint per square.

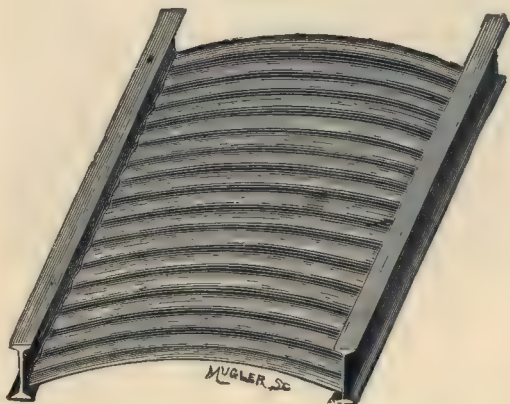
All Painted Iron from No. 16 to 24 inclusive and all gauges of Galvanized Iron, banded ; Nos. 26, 27 and 28 of painted Iron, crated for shipment.

FIG. 30.



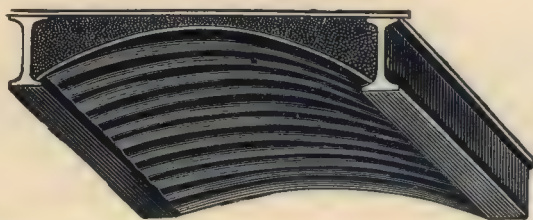
Shows corrugated sheet curved for Roofs and Ceilings. Sheets curved to any required radius and can be furnished in 7 sizes of corrugations as shown by Figs. 15, 17, 19, 21, 23, 25, 27 and in any gauge from No. 16 to 28 inclusive. Sheets are curved to specifications furnished with order. We have the best facilities of any firm in the United States for curving corrugated iron. The best variety of corrugations to select from and guarantee all curving perfect to correspond with specifications furnished.

FIG. 31.



Shows application of Curved Iron on Iron Floor Beams for ceilings in fire proof buildings before concrete filling is put in.

FIG. 32.



Shows application of Curved Iron on Iron Floor Beams for ceilings in Fire Proof Building after concrete filling is put in. These Arches being lighter, better and cheaper than arches of brick have largely supplanted the use of the latter for Fire Proof Floors. These ceilings can be painted in any color to suit the taste, and can be made to present a very artistic appearance.

PRICES QUOTED ON SPECIFICATIONS ONLY.

READ THIS.

In comparing our quotations on Corrugated Iron with that of other manufacturers, please note that our measurements for width are for *covering* widths and not *full widths*, as quoted by some others. We furnish for a square from six to nine square feet more than they do. Read our table of number of sheets furnished per square. Also note that we make no extra charge for nails and paint. To make a fair comparison in quotations, add to their quotation 7 per cent. for difference in width, and 10 cents per square for nails and paint, and then compare the quotations; also compare their weight per square on the different gauges and see if their weights on the same gauges equal our weights.

We furnish per square of 1 in. Corrugated Iron, covering width 24 inches.

6 $\frac{1}{4}$ Sheets 8 feet long.

7 $\frac{1}{7}$ " 7 " "

8 $\frac{1}{8}$ " 6 " "

2 and 3 in. Corrugated Iron. Covering width 24 inches.

5 Sheets, 10 feet long.

5 $\frac{5}{8}$ " 9 " "

6 $\frac{1}{2}$ " 8 " "

7 $\frac{1}{7}$ " 7 " "

8 $\frac{1}{8}$ " 6 " "

2 $\frac{3}{8}$ in. Corrugated Iron. Covering width 23 $\frac{1}{2}$ inches.

5 $\frac{1}{10}$ Sheets, 10 feet long.

5 $\frac{3}{8}$ " 9 " "

6 $\frac{3}{8}$ " 8 " "

7 $\frac{2}{7}$ " 7 " "

8 $\frac{1}{2}$ " 6 " "

1 $\frac{1}{4}$, 2 $\frac{1}{2}$ and 5 in. Corrugated Iron. Covering width 25 inches.

4 $\frac{4}{5}$ Sheets, 10 feet long.

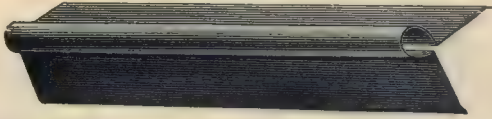
5 $\frac{1}{8}$ " 9 " "

6 " 8 " "

6 $\frac{5}{7}$ " 7 " "

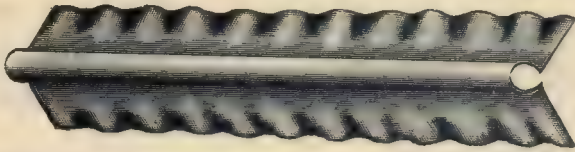
8 " 6 " "

FIG. 33.



Shows Iron Ridge Roll for use on Ridge to finish up ridge and make water tight, as shown in Fig. 42. This we make in three sizes, 2, $2\frac{1}{2}$ and 3 inch roll. They can be nailed or riveted to place on ridge. Regular length 7 feet.

FIG. 34.



Shows Corrugated Steel Ridge Roll. This we make in 2 inch roll only, and to fit three sizes of corrugations, 2, $2\frac{3}{8}$, and $2\frac{1}{2}$ inch. Regular length, 28 inches.

FIG. 35.



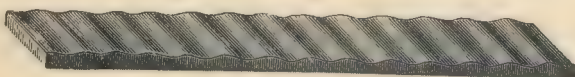
Shows Iron Ridging. This is as fully as good for the purpose as Ridge Roll and is cheaper, but does not make as finished an appearance. Regular length 7 feet.

FIG. 36.



Shows Iron Corner Roll for use on corners of buildings where sides are covered with Corrugated Iron, and should always be used with Grain Elevator Corrugated siding. This we make in one size. 1 inch roll, usual length 28 inches, except where used with Elevator Siding, where it is made same length as the siding, to correspond.

FIG. 37.



Shows Corrugated Wood for use at ridge of roof when covered with Corrugated Iron, being used between the Corrugated Iron and Ridge Roll on each side of Ridge. Regular length 8 feet. Order twice the length of Ridge.

PRICE LIST.

IRON RIDGE ROLL.

SEE FIGS. 33 AND 36.

| | | | | | | | | | | | | | | |
|---------|----|------|---------------|-----|--------|-------|---|------|-------|-------|---|----|--------|---|
| No. 26, | 1 | inch | Roll Painted, | per | lineal | foot, | 8 | inch | girt, | - | - | 10 | cents. | |
| 24, | 1 | " | " | " | " | " | " | - | - | - | - | 11 | " | |
| 26, | 2 | " | " | " | " | " | " | 14 | inch | girt, | - | - | 12 | " |
| 24, | 2 | " | " | " | " | " | " | " | - | - | - | - | 13 | " |
| 26, | 2½ | " | " | " | " | " | " | 15 | inch | girt, | - | - | 14 | " |
| 24, | 2½ | " | " | " | " | " | " | " | - | - | - | - | 15 | " |
| 22, | 3 | " | " | " | " | " | " | " | - | - | - | - | 18 | " |
| 26, | 1 | " | Galvanized, | " | " | " | " | - | - | - | - | - | 13 | " |
| 24, | 1 | " | " | " | " | " | " | " | - | - | - | - | 14 | " |
| 26, | 2 | " | " | " | " | " | " | " | - | - | - | - | 15 | " |
| 24, | 2 | " | " | " | " | " | " | " | - | - | - | - | 16 | " |
| 26, | 2½ | " | " | " | " | " | " | " | - | - | - | - | 17 | " |
| 24, | 2½ | " | " | " | " | " | " | " | - | - | - | - | 18 | " |
| 22, | 3 | " | " | " | " | " | " | " | - | - | - | - | 22 | " |

CORRUGATED STEEL RIDGE ROLL.

SEE FIG. 34.

| | | | | | | | | | | | | | |
|---------|---|------|------|-------------|-----|--------|-------|---|---|---|---|----|--------|
| No. 26, | 2 | inch | Roll | Painted, | per | lineal | foot, | - | - | - | - | 16 | cents. |
| 24, | 2 | " | " | " | " | " | " | - | - | - | - | 17 | " |
| 26, | 2 | " | " | Galvanized, | " | " | " | - | - | - | - | 20 | " |
| 24, | 2 | " | " | " | " | " | " | - | - | - | - | 21 | " |

IRON RIDGING.

SEE FIG. 35.

| | | | | | | | | | | | | | |
|---------|----|------|------|-------------|-----|--------|-------|---|---|---|---|----|--------|
| No. 26, | 12 | inch | Girt | Painted, | per | lineal | foot, | - | - | - | - | 11 | cents. |
| 24, | 12 | " | " | " | " | " | " | - | - | - | - | 12 | " |
| 22, | 12 | " | " | " | " | " | " | - | - | - | - | 13 | " |
| 26, | 12 | " | " | Galvanized, | " | " | " | - | - | - | - | 15 | " |
| 24, | 12 | " | " | " | " | " | " | - | - | - | - | 16 | " |
| 22, | 12 | " | " | " | " | " | " | - | - | - | - | 17 | " |

CORRUGATED WOOD.

SEE FIG. 37.

| | | | | | | | | | | | | |
|-------|-----------------|--------------|-----|--------|-------|---|---|---|---|---|---|--------|
| For 2 | inch | Corrugation, | per | lineal | foot, | - | - | - | - | - | 6 | cents. |
| " | 2 $\frac{3}{8}$ | " | " | " | " | " | " | - | - | - | 6 | " |
| " | 2 $\frac{1}{2}$ | " | " | " | " | " | " | - | - | - | 6 | " |
| " | 3 | " | " | " | " | " | " | - | - | - | 5 | " |
| " | 5 | " | " | " | " | " | " | - | - | - | 5 | " |

FIG. 38.



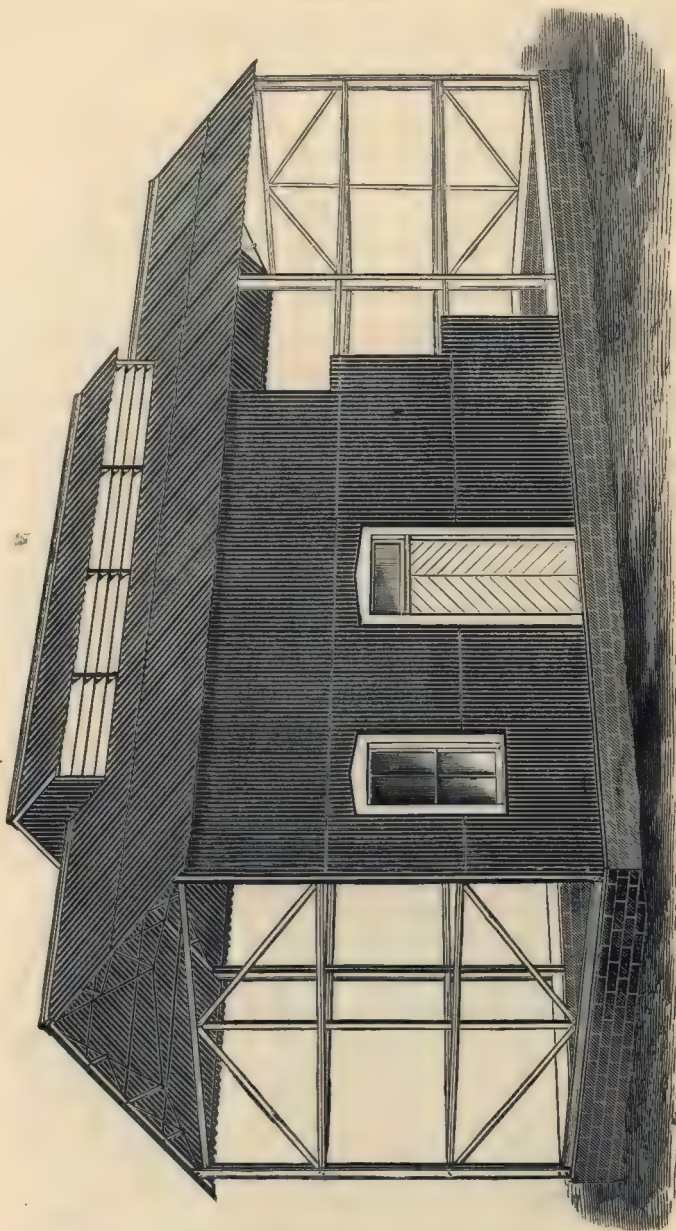
Shows full size of Steel Wire Barb Nails used in fastening Corrugated Iron for roofing, siding and ceiling.

PRICE LIST.

OVAL HEAD, FLAT UNDERNEATH.

| | | | | | | | | |
|----|------|-------|---------------|---|---|---|---|-----------------|
| 2½ | inch | No. 7 | 100 lb. kegs, | - | - | - | - | \$6 00 per keg. |
| 2 | " | " | 7 | " | " | - | - | 6 25 " |
| 2 | " | " | 9 | " | " | - | - | 6 25 " |
| 1¾ | " | " | 9 | " | " | - | - | 6 50 " |
| 1½ | " | " | 7 | " | " | - | - | 6 75 " |
| 1½ | " | " | 9 | " | " | - | - | 6 75 " |
| 1½ | " | " | 10 | " | " | - | - | 7 00 " |
| 1 | " | " | 10 | " | " | - | - | 7 25 " |
| 1 | " | " | 11 | " | " | - | - | 7 25 " |

FIG. 39.



Shows application of Corrugated Iron on Iron Truss Roof and sides of an iron frame building.

For a cheap, durable, fire proof covering, Corrugated Iron is unequaled and is extensively used all over the country for all kinds of buildings, porticos, awnings, etc.

If parties ordering Corrugated Iron will give exact length of rafter and width of roof as per our diagram sheet, we can often send sheets of right length to fit roof and thus save labor, cutting and waste of iron.

ILLUSTRATED INSTRUCTIONS

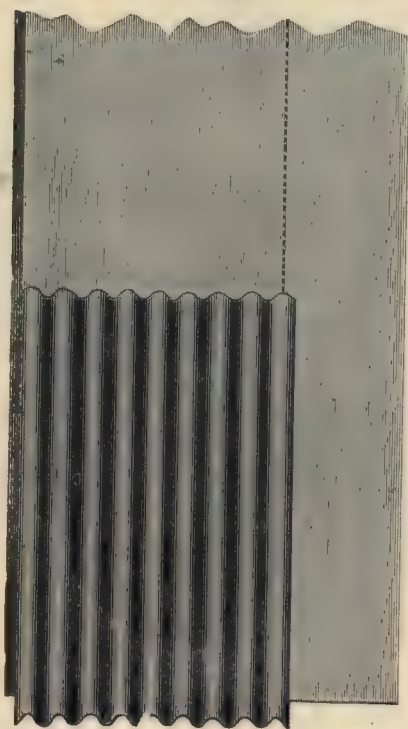
— FOR —

LAYING CORRUGATED IRON.

FOR ROOFING ON SHEATHING.

Commence laying sheets at left hand corner of Eave and End of building. Strike a chalk line at right distance from edge of roof, from Eave to Ridge. For 2 and 3 inch corrugations it would be about 24 inches; for $2\frac{3}{4}$ inch corrugation, about $23\frac{1}{2}$ inches; for $2\frac{1}{2}$ and 5 inch corrugations, about 25 inches. Let first sheet project over eave about three inches and lay first course from Eave to Ridge, keeping center of outside corrugation at right hand of sheet, directly over the chalk line, as shown in

FIG. 40.



Continue laying sheets, giving 4 inches lap at end, until they reach the ridge, taking care that outside corrugation of all sheets is directly over the chalk line, so as to get first course started straight. Commence second course at eave, giving one corrugation for side lap and taking care that the side corrugations center each other exactly. This is an essential point in

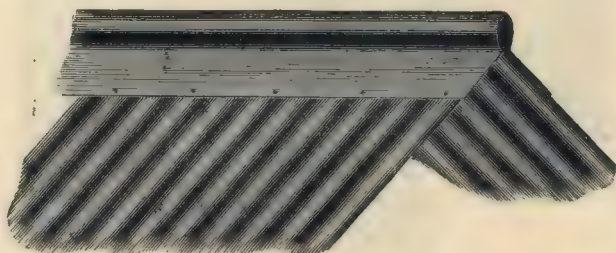
order to keep your courses straight and should be strictly observed in laying Corrugated Iron for any purpose. Start your courses straight. Keep them straight and you will have no trouble in making a perfect job. Nail in every other corrugation at end laps and about every 12 inches at side lap, nailing through top of corrugation as shown in

FIG. 41.



Continue laying in like manner until roof is covered. If a ridge roof, finish up ridge with Iron Ridge Roll, as shown in

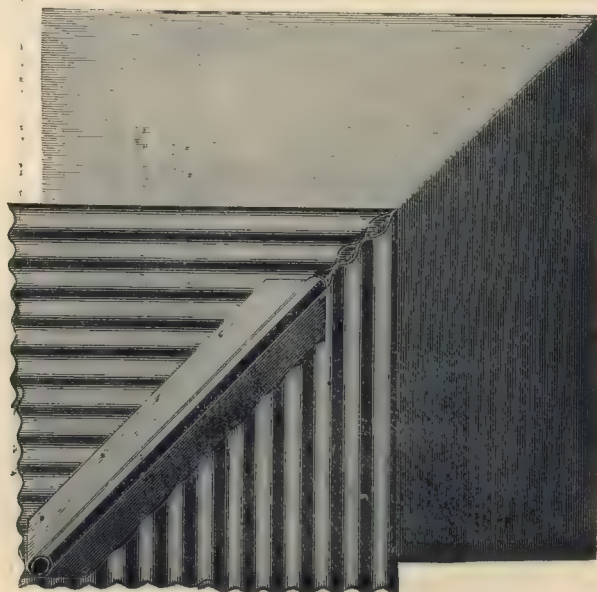
FIG 42



or with Corrugated Ridge Roll or Iron Ridging, as shown in Figs. 34 and 35.

If there are Hips on roof, cut Corrugated Iron up the Hips and cover Hip Joint with Iron Ridge Roll, as shown in

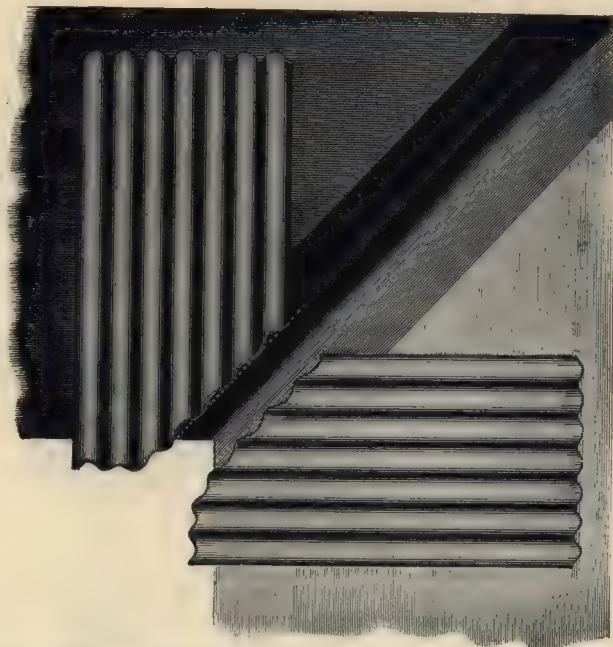
FIG. 43.



or the Hip Joint can be covered with Iron Ridging.

If there are Valleys in roof, form a sheet or sheets of plain painted iron from 14 to 20 inches wide to fit the Valley, and cut Corrugated Iron up the Valley, as shown in

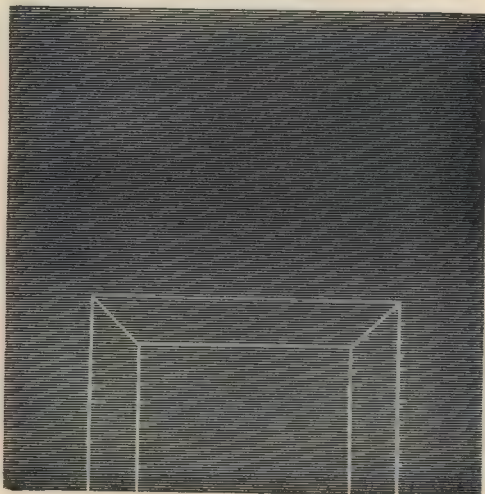
FIG 44.



letting corrugated iron lap over plain iron 4 to 6 inches. Nail corrugated iron up the valley through top of corrugations, as shown in Fig. 41.

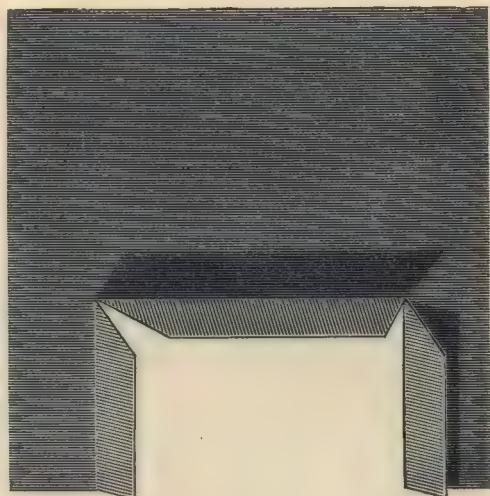
To cut around a chimney and make water tight, take a plain piece of painted sheet iron of the requisite size for chimney and mark so as to leave a flange of 4 to 6 inches when cut, as shown in

FIG. 45.



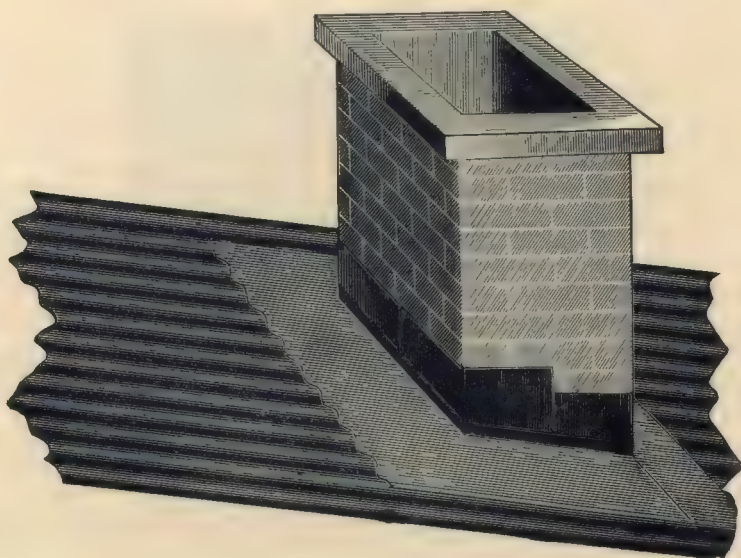
Cut at inside lines and turn at outside lines to form flanges to fit around chimney, as shown in

FIG. 46.



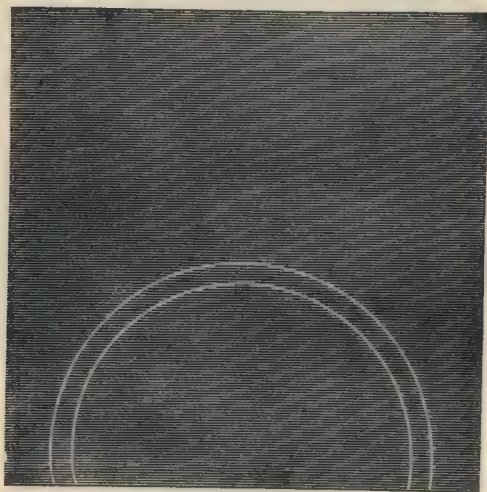
Place this sheet in position around the chimney, and in laying the corrugated iron, leave about 6 inches above the upper side of chimney for water channel, allowing the plain iron to run up under the corrugated iron about 12 inches. Cut corner pieces of iron to fill out the corners at chimney left open, fill with cement and counter-flash over the flanges of the plain sheet, allowing the counter-flashing at rear of chimney to project OVER the corrugated iron not less than 6 inches, as shown in

FIG. 47.



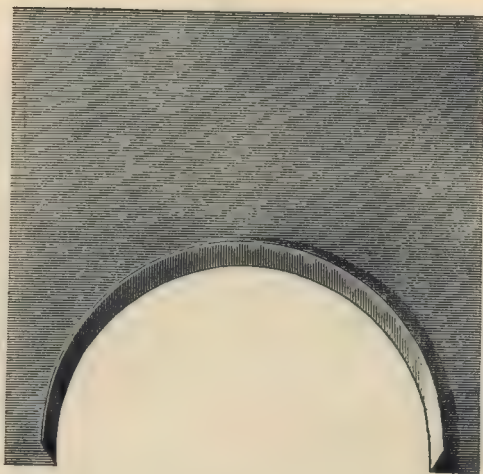
To cut around a round stack, take 2 pieces of plain sheet iron of right size and mark so as to leave a flange of 1 to 2 inches, as shown in

FIG. 48.



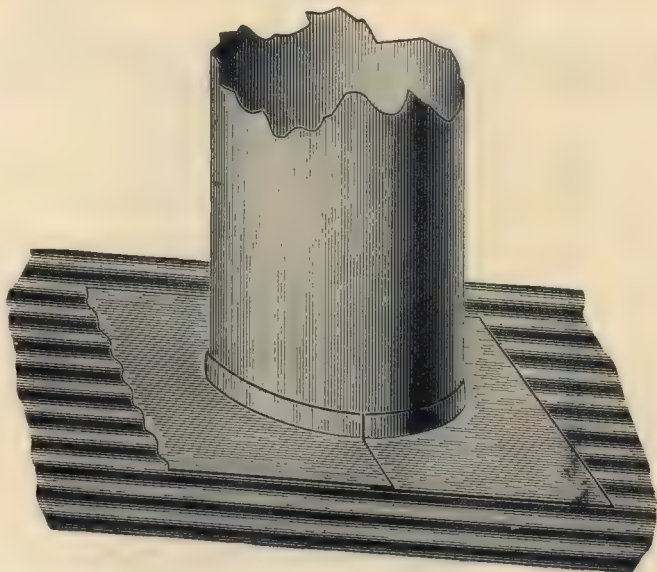
Cut and turn flanges as shown in

FIG. 49.



Let one sheet run UNDER corrugated iron above the stack and the other run OVER the corrugated iron behind stack, and finish up as shown in

FIG. 50.



FOR ROOFING ON WOOD OR IRON TRUSSES.

On Wood or Iron Truss Roofs, we advise using sheets corrugated so as to give $1\frac{1}{2}$ corrugations on side lap as shown in

FIG. 51.



This gives a better appearance on under side of roof and adds strength to the side lap, which is rendered necessary when purlins are from 3 to 8 feet apart. In our own contracts we always specify $1\frac{1}{2}$ corrugations on side lap on Truss Roofs.

Commence at left hand corner of Eave and End of building, letting sheets project over Eave from 6 to 18 inches, according to gauge of iron used and projection wanted.

Give 6 inches lap at ends of sheets and nail in every other corrugation through top of corrugations across the sheets on Wood Purlins, and rivet side laps every 12 inches. If on Iron Purlins of single channel or I beams, fasten with clip and bolt as shown in

FIG. 52.



If on Iron Purlins of 2 angles, use clip and bolt as shown in

FIG. 53.



Lay all courses from Eave to Ridge, using 2 clips and bolts to each purlin, one on outside corrugation and one on center corrugation of sheet. Use iron washer under nut and run nut down on bolts with brace and socket wrench. Bolts can be cut off flush with top of nut with a bolt clipper. Rivet side laps about every 12 inches, and end laps in every other corrugation.

Finish up Ridge, if Ridge Roof, with Iron Ridge Roll or Iron Ridging, which can be nailed or riveted to place.

If we have diagram of Roof, showing location and distance between centers of purlins, we can space up roof and send sheets right length for courses from eave to ridge, including laps and projection.

PITCH OF ROOF.

We would not advise the use of corrugated iron on any roof of less pitch than 3 inches to the foot, and more is better. (Awnings would answer at $1\frac{1}{2}$ to 2 inches to the foot.) Truss roofs should have a pitch of $\frac{1}{8}$ to $\frac{1}{4}$ pitch.

DISTANCE BETWEEN SUPPORTS ON ROOFS.

| | | | | | | |
|--------------|---|---|---|-----|-----|---|
| No. 16 | can be used on purlins 7 to 9 feet apart. | | | | | |
| No. 18 | " | " | " | 6 " | 7 " | " |
| No. 20 to 22 | " | " | " | 4 " | 5 " | " |
| No. 24 | " | " | " | 2 " | 3 " | " |
| No. 26 | " | " | " | 1 " | 2 " | " |

Nos. 27 and 28 had better be used on close boarding or on 6 inch strips laid not more than 3 inches apart.

CORRUGATED SIDING.

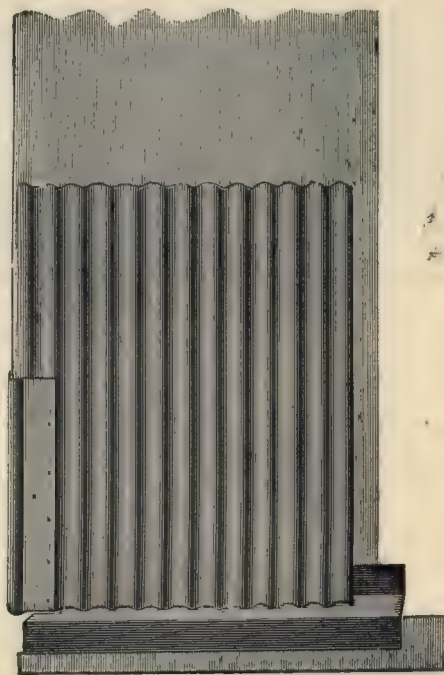
Commence at left hand corner, laying courses from Base to Cornice, giving sheets from 1 to 2 inches lap at end and 1 corrugation lap at side. Nail side laps every 6 inches and end laps in every other corrugation in 2, $2\frac{3}{8}$ and $2\frac{1}{2}$ inch corrugations, and every third corrugation in 1 and $1\frac{1}{4}$ inch corrugations, driving nails as shown in

FIG. 54.



Care should be taken that the iron is kept a few inches from the ground. We usually use a base board 6 to 12 inches wide, partially covered with plain iron base, with flange of 2 inches to go up under the corrugated iron and corners can be finished up with Iron Corner Roll as shown in

FIG. 55.



If siding is put on studding, care should be taken to have the studding same distance between centers as the width of iron used, and pieces of wood will have to be put in between studding at ends of sheets to nail to, or end laps can be riveted. If Posts are used, Girts can be placed 2 to 8 feet apart and side laps riveted about every 12 inches.

CORRUGATED ELEVATOR SIDING FOR GRAIN ELEVATORS.

In covering large Grain Elevators, we find it advisable to use 4 swinging scaffolds, each say 20 feet long. Each scaffold will lay up from Base to Cornice 11 courses of sheets, or 22 feet. Commence at left hand corner at Base, giving sheets 1 corrugation side lap and $1\frac{1}{2}$ inches lap at ends. Nail in holes punched in sheets, which are 3 inches from lower edge of sheet. This allows for a settling of $1\frac{1}{2}$ inches in every $31\frac{1}{2}$ inches without disturbing the fastenings of the sheets. Use half sheet to break joints in every other course, as shown in Fig. 29. Where iron is applied to boards on studding, side laps can be nailed if necessary, but, on bin surface, iron must be nailed only along the bottom edge of sheets, and no nails must be used in side laps, so as to allow each sheet to act independently as sides settle. Finish up corners of Elevator with Iron Corner Roll, as shown in Fig. 55.

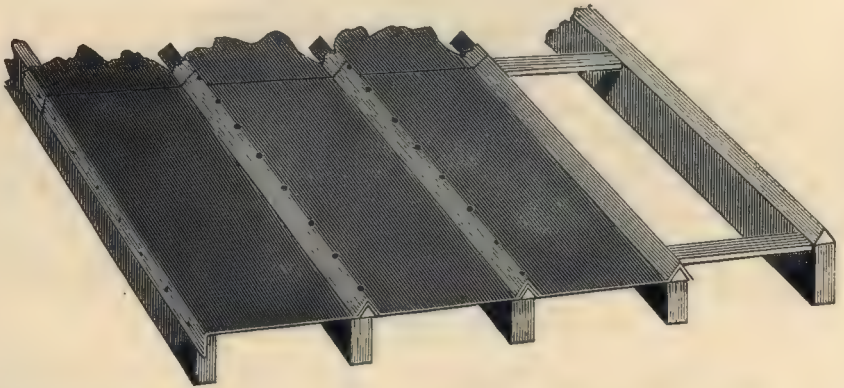
CRIMPED SHEET IRON.

FIG. 56.



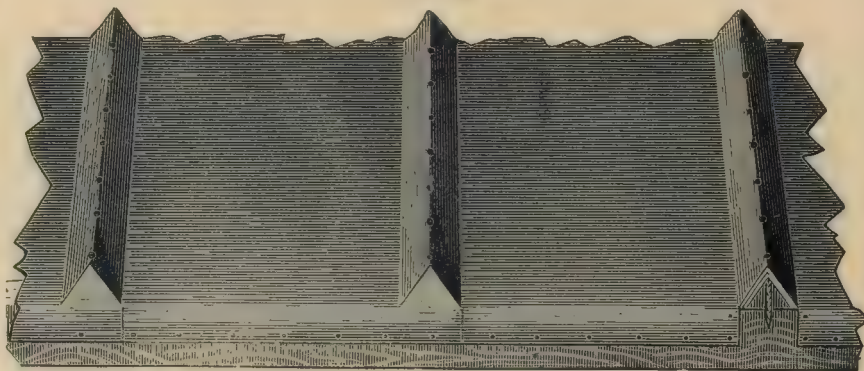
Shows sheet of Crimped Iron for Roofing. Sheets when crimped cover 24 inches from center to center of crimps, and can be furnished any length up to $8\frac{1}{2}$ feet; in gauges from No. 20 to 28 inclusive. This makes a cheap, durable, Fire-Proof Roofing, and is used largely on Rolling Mills, Saw Mills, Cotton Sheds, etc.

FIG. 57.



Shows application on Rafters. Set rafters 24 inches from centers and nail triangular wood strips, that are shipped with the roofing, on top surface of rafters. Place cross pieces between the rafters, level with top of rafters, to support, and nail the ends of sheets. Commence at left hand corner of eave and end of building, and lay sheets from eave to ridge, giving 3 inches lap at ends and lapping one crimp over the other at sides. Nail through top of crimp about every 12 inches; at end laps, use 4 nails to the lap.

FIG. 58.



Shows application on Sheathing. Ends of sheets can be either lapped 3 inches or put together with Lock Joint.

FIG. 59.



Shows Lap Joint as nailed.

FIG. 60.



Shows Lock Joint as applied to Sheathing.

To make Lock Joint, take a pair of Tinner's snips and cut in five-eighths of an inch close to crimps on each end of sheet. Turn one end under and one end over, and when put together on roof, mallet the joint down close. If a Ridge Roof, finish up ridge with Iron Ridging, as shown in Fig. 35.

PRICE LIST.

| Gauge. | Per square. | Weight per square foot flat. | Weight per 100 square feet crimped. | Average shipping weight. |
|--------------------------|-------------|------------------------------|-------------------------------------|--------------------------|
| No. 20, Painted Red..... | \$6.55 | 1.54 | 170 | 172 |
| No. 22, " "..... | 5.80 | 1.25 | 138 | 140 |
| No. 24, " "..... | 4.90 | 1.00 | 110 | 115 |
| No. 26, " "..... | 4.30 | .80 | 88 | 95 |
| No. 27, " "..... | 4.05 | .72 | 77 | 82 |
| No. 28, " "..... | 3.95 | .64 | 70 | 75 |
| No. 20, Galvanized... .. | 9.30 | 25 oz. | 172 | 174 |
| No. 22, " "..... | 8.00 | 20 | 138 | 147 |
| No. 24, " "..... | 6.75 | 16 | 110 | 119 |
| No. 26, " "..... | 6.30 | 14 | 90 | 95 |
| No. 27, " "..... | 6.15 | 13 | 82 | 87 |
| No. 28, " "..... | 6.00 | 12 | 76 | 80 |

Above quotations are for regular widths and lengths. Sheets cover 24 inches wide. Regular lengths, 6, 7 and 8 feet; extreme length, $8\frac{1}{2}$ feet. No allowance for end laps. Sheets should have 3 inches lap at ends where lapped. One square consists of $6\frac{1}{4}$ sheets, 24x96 inches or equivalent. Price includes on Nos. 20 and 22, $1\frac{3}{4}$ lbs. 2 inch No. 7 barb wire nails; on balance of gauges, 1 lb. $1\frac{1}{4}$ inch No. 9 barb wire nails, 50 lineal feet wood strips and $1\frac{1}{2}$ lbs. dry paint per square. Nos. 20, 22 and 24 shipped in bundles banded. Nos. 26, 27 and 28 crated for shipment.

BEADED SHEET IRON.

FIG. 61.



Shows sheet of Beaded Iron for Siding and Ceiling. Sheets when beaded cover 24 inches from center to center of outside beads and can be furnished any length up to 10 feet in gauges from No. 24 to 28 inclusive.

We always ship sheets 96 inches long, unless otherwise ordered. For a cheap and desirable Fire-Proof Siding and Ceiling, we consider this the best in the market. For siding it can be applied on sheathing boards or directly on studding placed 24 inches from centers. As a Ceiling, it can be applied directly on the floor joists, on boarding or put on over old plaster, making a light, finished and Fire-Proof Ceiling at a comparatively small cost. Give sheets 1 to 2 inches lap at ends and lap one bead at side. Nail side laps every three inches and end laps close to every bead. After laying, the Ceiling can be painted any desired color.

PRICE LIST.

| Gauge. | Per Square. | Weight per square foot flat. | Weight per 100 square feet beaded. | Average shipping weight. |
|--------------------------|-------------|------------------------------|------------------------------------|--------------------------|
| No. 24, Painted Red..... | \$ 4 80 | 1.00 | 110 | 1 15 |
| No. 26, " "..... | 4 20 | .80 | 88 | 95 |
| No. 27, " "..... | 3 95 | .72 | 77 | 85 |
| No. 28, " "..... | 3 85 | .64 | 70 | 75 |
| No. 24, Galvanized..... | 6 65 | 16 oz. | 110 | 1 10 |
| No. 26, " "..... | 6 20 | 14 | 90 | 95 |
| No. 27, " "..... | 6 05 | 13 | 82 | 87 |
| No. 28, " "..... | 5 95 | 12 | 76 | 80 |

Above quotations are for regular widths and lengths. Beads $\frac{3}{8}$ inch wide, $\frac{1}{8}$ inch deep, 3 inches from center to center of beads. Sheets cover 24 inches wide from center to center of outside beads. Regular lengths 6, 7 and 8 feet. Sheets should have 1 to 2 inches lap at ends. One square consists of $6\frac{1}{4}$ sheets 24x96 inches or equivalent. Price includes $1\frac{1}{2}$ pounds 1 inch No. 11 barb wire nails and one pound dry paint per square.

STANDARD DOUBLE CAP ROOFING.

(OR PRESSED STANDING SEAM.)

OF IRON OR STEEL.

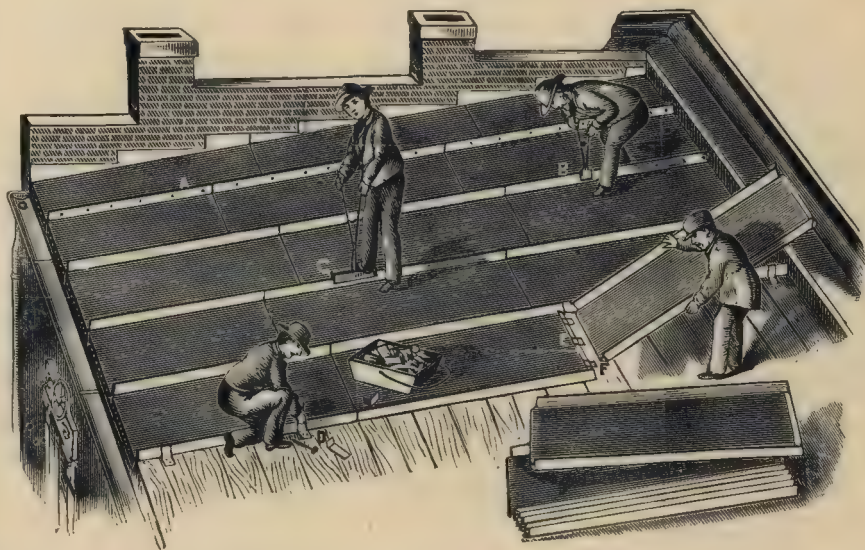
FIG. 62.



Shows sheet of our Double Cap Roofing manufactured ready for Shipment. Average size of sheets 7 feet 10 inches long by 2 feet wide.

They are formed with a Cap or Standing Groove $1\frac{1}{8}$ inches high on each side and a $\frac{5}{8}$ inch lock on each end.

FIG. 63



Shows our Double Cap Roofing in process of Laying.

A—Cap Complete.

D—Cleating Down.

B—Punching.

E—Flat Cleats applied on end of Sheets.

C—Closing up Caps.

F—Lock on end of Sheet.

FIRE PROOF.

It furnishes no food for the flames, neither will it crack or slide off by the action of heat and water, but will keep its place as long as there is anything left to sustain it. Insurance risks may safely be reduced from 25 to 50 per cent.

PITCH OF ROOF.

It has been successfully tested on all kinds of pitch, from one inch rise per foot, up.

SAFETY FROM LIGHTNING.

Prof. Mitchell says: "It is impossible that a building covered by iron should be injured by lightning, the large surface of metal scattering the electricity and rendering it harmless."

Prof. John Wise says: "My observations authorize me to say that when Metal Roofs shall become the rule, instead of the exception, injury to our buildings and their contents by Jupiters artillery will have passed away, as the apprehended danger has passed away before the light of rational knowledge."

DURABILITY.

NEWCOMERSTOWN, O., Dec. 1, 1879.

Gentlemen:—Your Roofing has given *entire satisfaction*. There is an iron roof in this town that has been on for about thirty years, and is good yet.

Respectfully yours,

I. CRATER, JR.

NEWCOMERSTOWN, O., Aug. 28, 1889.

Gentlemen:—Your letter received. In regard to roof I wrote about December 1st, 1879. It is still on and in good condition. If the roofs are painted every 3 or 4 years, they will last a lifetime.

Respectfully yours,

I. CRATER.

ESTIMATED COST OF LAYING.

We estimate cost of laying from 25 to 75 cents per square, according to size, shape and pitch of roof, and depending somewhat on the skill of the workman as shown by the following quotation from a letter received from one of our customers:

ANN ARBOR, MICH., Sept. 27, 1889.

I have a man and helper in my shop who put on 15 squares in 6 hours. Do you have men who lay more roof in the same length of time?

C. EBERBACH.

In this connection we might say that Mr. Eberbach is evidently a pusher, and believes in keeping the same kind of men in his employ.

In addition to the cost of laying, add for paint 15 to 20 cents per square for boiled linseed oil and Japan Dryer.

ITS CLAIMS.

We claim for our Double Cap, the following advantages :

The material used in what we call iron is of extra selected stock.

It is rolled smooth.

It is uniform in gauge.

It is box annealed.

It is free from scale and smoke.

The sheets of what we call iron are made with one face of steel, the other face and center of sheet, of iron, which makes, in our judgment equally as good a roofing sheet as all steel, and we do not hesitate to assert that the bulk of the so-called steel roofing that has been and is at present being sold under the name of steel is no better, and the sheets are made in identically the same manner as the sheets we call iron. For the consumer who desires to use a roofing made of steel sheets, we are prepared to furnish a roofing made of the best cold rolled steel sheets in the market and we *guarantee* it to be *all steel*.

The sheets are formed with a cap on each side which makes a stronger, better roof than where separate caps are used, and shows conclusively the superior quality of the iron used.

The caps are riveted together with copper rivets. The sheets are cleated at the ends as well as at the sides, which does not interfere with *contraction* and *expansion*, but prevents *blowing off*, *noises*, *rumbling*, etc.

IT IS EASILY APPLIED.

It is adapted to all kinds of buildings where laid on sheathing.

It has given the best of satisfaction for *eighteen years*.

It has been *thoroughly tested*.

In calling your attention to our Double Cap Roofing, we wish to make special mention of a few facts in regard to the superior qualities this Roofing has over others, and which will be worth the consideration of any one who contemplates having an Iron or Steel Roof.

Our Double Cap Roofing is complete in every respect, and ready to lay when shipped; you have no sides to turn up, no end locks to make, as in every other Roof in the market.

In our Double Cap Roofing you have none of this to contend with. We don't send you the iron and let you make your own roofing, we send you a *complete roofing, ready to put on when you get it*.

FASTENING.


Every sheet of our Double Cap is fastened indirectly to the roof boards eight times—five on the sides and three on the ends—while in "roll cap" roofing you cannot fasten the ends of the sheets only at the eaves and ridge of the building, leaving the ends of the sheets, of the entire course, without any fastening or protection whatever against the action of the wind.

You will save time, money and trouble by using it.

Buy our Double Cap Roofing, and none other, if you want a good roof.

In addition to the tools we send, you will want tinner's shears, mallet, rivet set, etc.

Do not buy a metal roof until you fully investigate our Double Cap.

 One ply of roofing felt should be laid under the iron where gas or steam are used in the building, or where there is heat next to the roof to cause dripping or sweating from condensation in cold weather. And we advise the use of our Water Proof Sheathing under all metal roofs when laid on sheathing boards.

READ THIS.

In comparing our quotations on Double Cap or Pressed Standing Seam, please note that the *end locks* on our Sheets are *turned* and *not considered as turned*. We turn the end locks and measure the sheets after end locks are turned, and give you more iron for a square and save you the labor of turning end locks by hand. This you can safely figure at 10 to 15 cents per square, in our favor on quotations as made by others. Also that our prices include Cleats, Copper Rivets and Burs, Nails and Dry Mineral Paint for final coat.

FREIGHT.

Our Roofing is all crated, thus securing the lowest classification of freight. Having unequaled facilities both by rail and water, we are always able to secure low rates of freight to all sections of the country.

PRICE LIST.

DOUBLE CAP ROOFING OF IRON OR STEEL.

| Gauge. | Per Square. | Weight per square foot flat. | Weight per 100 square feet made up | Average shipping weight. |
|---|-------------|------------------------------|------------------------------------|--------------------------|
| No. 27, Iron, Painted Red | \$4.40 | .72 | 85 | 90 |
| No. 28, " " " | 4.10 | .64 | 77 | 82 |
| No. 27, Cold Rolled Steel Painted Red . . . | 4.90 | .72 | 86 | 91 |
| No. 28, " " " " " | 4.60 | .64 | 78 | 83 |
| No. 27, Galvanized Steel | 6.60 | 13 oz. | 94 | 99 |
| No. 28, " " " | 6.50 | 12 oz. | 86 | 91 |

Average size of sheets 24 inches wide by 94 inches long. Sides and ends formed ready for laying before shipment. A square as shipped will cover 100 square feet on roof less waste in cutting for hips and valleys, &c. Price includes 35 standing cleats, 25 flat cleats, $\frac{1}{8}$ pound $\frac{3}{8}$ No. 10 copper rivets and burs, $\frac{1}{2}$ pound 1 inch No. 10 barb wire nails and $1\frac{1}{2}$ pound dry paint per square. With the Double Cap we send roofing punch and tongs for which we charge \$7.00, and when you are through with them return to us with tag attached showing name of shipper, charges prepaid, and we will refund or credit you with the amount.

ILLUSTRATED INSTRUCTIONS

— FOR —

LAYING DOUBLE CAP ROOFING.

FIG. 64.

Fig. 64 shows a section of Double Cap Roofing put on roof.

A—Full sized sheet.

B—Piece of sheet starting second course.

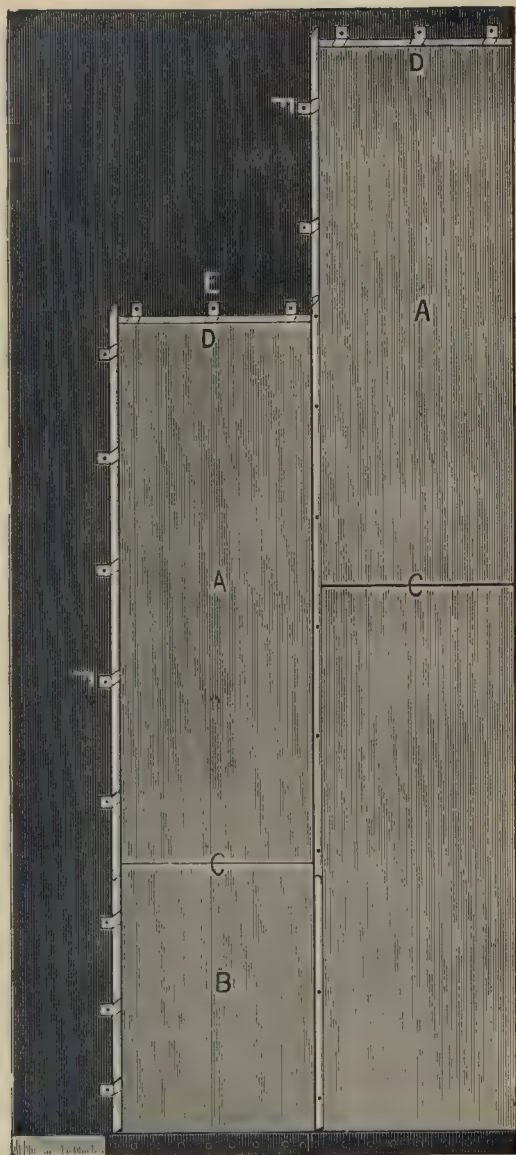
C—Seam at ends of sheets.

D—Lock at upper ends of sheets.

E—Flat cleat as applied on roof.

F—Standing cleat as applied on roof.

G—Standing cleat.



Commence laying Sheets at right hand corner of eave and end of building.

Flatten out the right hand cap on sheets for first course, and lay left hand cap to a chalk line so as to get course started straight. Let the bottom sheet project an inch or more over eave and end of building, or, if there are Fire Walls, turn up the iron on the side of sheet, 4 to 6 inches, nail securely and counter flash, as shown at A, Fig. 68. Fasten the top of sheet with three flat cleats, hooked in the lock on upper end, as shown in Fig. 64, one in center, and one close to each cap on side of sheet.

Slit close to cap the projecting part of the sheet, bend it down and nail to eave. Continue laying sheets, lock jointing ends, until they reach the upper part of roof. If a Gable Roof, cut sheets off so as to turn up an inch at ridge, as shown in

FIG. 65.



To form the turn up, cut the caps an inch back from upper end of sheet, which allows the end to turn. Take tongs, close the left hand cap, and fasten every 18 inches with standing cleats, as shown in Fig. 64. Take piece of sheet that cuts off at ridge, and commence at eave, laying up, same as first course. Before cleating second course on the sides, take tongs and close the right hand cap, drawing second course as close as possible to first course, so as to allow the rivets to reach through the caps.

Form the ridge or comb, by letting the sheets on opposite sides of roof turn up in same manner as above described, making the comb as shown in

FIG. 66.



Take caps sent with roofing, and put it over comb, as shown in

FIG. 67.



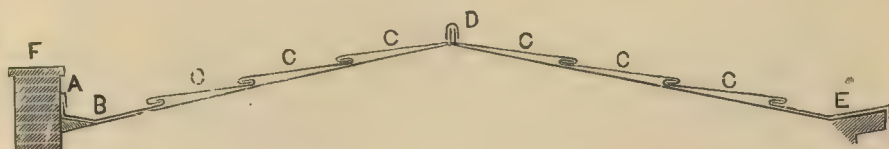
Rivet the caps at each end.

If the upper end of roof butts against another building, turn up the upper end of last sheet four inches, nail securely and counter flash, as shown at A, Fig. 68, if against a brick wall.

Hips can be formed in the same way as the comb, cutting sheets to suit the required angle.

Valleys should be laid first, and a lock turned on the edges, and then cut sheets the right angle, turn lock and hook into the Valley making a flat seam. To avoid waste cutting for Hips and Valleys, cut sheet so as to use both ends for the required angle, which can be done by flattening out the end lock of one of the pieces and turning it the opposite way.

FIG. 68.



- A—Counter flashing in brick wall.
 B—Tin Gutter showing turn-up against wall.
 C—Iron Roofing Sheets as laid on roof.
 D—Formation of Comb.
 E—Tin Gutter in cornice.
 F—Brick Fire Wall.

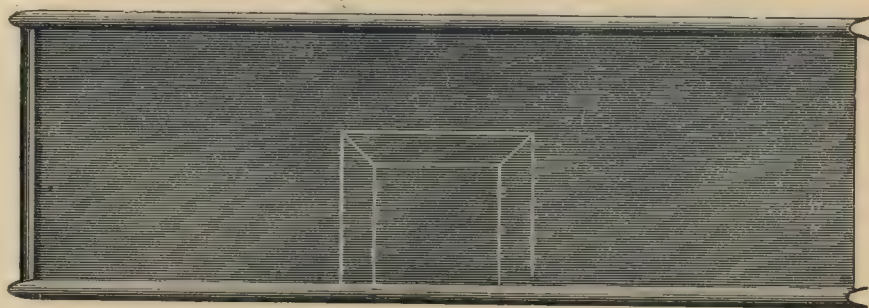
Fig. 68 shows an end view of Double Cap Roofing as applied on buildings with Fire Walls on the side, or with Cornice Gutter. Where Tin Gutter is used on a roof with Fire Walls, the upper side of Gutter where the iron connects, should be 20 to 40 inches above the center, or where the water flows, according to quantity of water the Gutter is calculated to carry. Better have the Gutter in such a roof *too large than too small*. In cornice gutters have upper side of tin gutter where iron hooks on, higher than the outside of cornice.

Use nothing but the best Charcoal Roofing Tin for Gutters.

For Valleys use Cold Rolled Steel, sent when ordered.

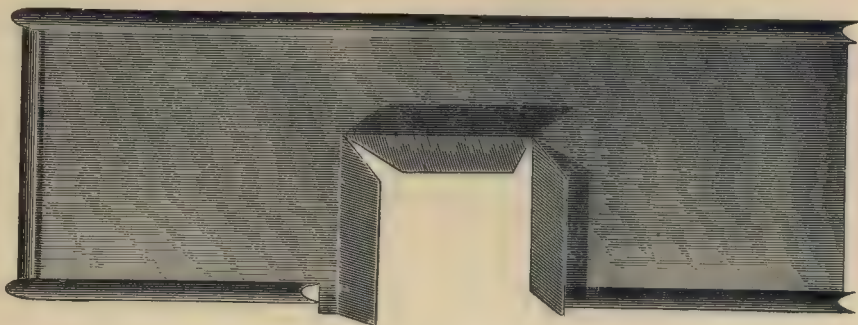
To cut around a chimney, get the distance from each course and mark out the sheet so as to leave a flange of 4 inches when cut, to turn up as shown in

FIG. 69.



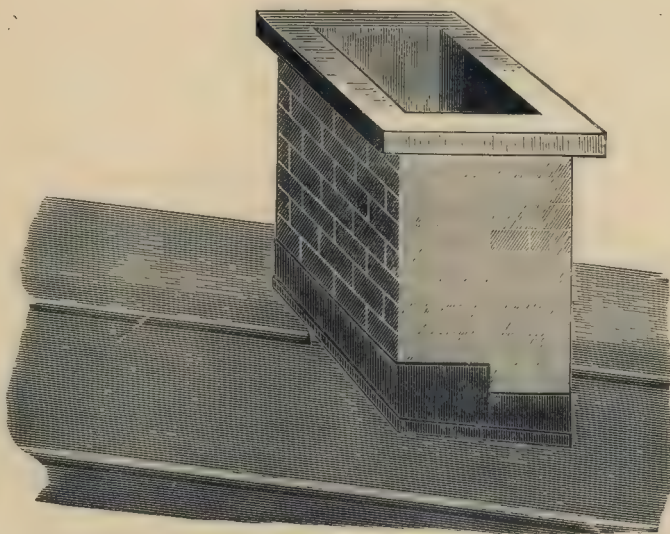
Cut at inside lines and turn at outside lines to form flanges to fit around chimney as shown in

FIG. 70.



The cap on the upper side of chimney is cut 4 inches above it and flattened out so as to allow the water to pass around. The sheet on the other side of chimney is cut in same manner, and the lap above chimney is nailed down and cemented with Elastic Cement. The corners of the chimney should have some corner pieces of iron fitted in and then cemented, and the chimney counter flashed as shown in

FIG. 71.



When roof is laid, rivet the standing caps every two feet, and then paint over the whole surface with a mixture of 6 pounds of iron paint to 1 gallon boiled linseed oil and 1 pint of japan dryer. After completion should any leak be discovered, find the place and use a little Elastic Cement. The Cement can be applied with a putty knife or a wood paddle.

ROLL CAP ROOFING OF IRON OR STEEL.

FIG. 72.



Shows roll of Cap Roofing manufactured ready for shipment. Each roll unless otherwise ordered, contains a strip of painted sheet iron or steel 26 inches wide and 50 feet long, making a square as laid on roof. This strip is composed of sheets of iron or steel seamed together at the ends with the best improved machines. These rolls can be made to contain any length up to 100 feet or more, but would not advise beyond 100 feet, we think 50 foot rolls are the most convenient to handle on roofs. If parties ordering will give us exact length of roof, we will send the rolls in right lengths to cover from eaves to high part of roof, if a shed roof, and if a gable roof can put rolls up to cover from eave to eave over the ridge; in this case, always add for turning of the iron over the edges of roof. Each roll before shipment is wrapped with heavy paper and securely fastened with wire, and unless otherwise specified, we put 50 lineal feet or 100 square feet in a roll.

PRICE LIST.

ROLL CAP ROOFING OF IRON OR STEEL.

| Gauge. | Per square. | Weight per square foot flat. | Weight per 100 square feet made up | Average shipping weight. |
|---|-------------|------------------------------|------------------------------------|--------------------------|
| No. 27, Iron Painted Red..... | \$4.40 | .72 | 85 | 85 |
| No. 28, " " "..... | 4.10 | .64 | 77 | 77 |
| No. 27, Cold Rolled Steel Painted Red.... | 4.90 | .72 | 86 | 86 |
| No. 28, " " " " "..... | 4.60 | .64 | 78 | 78 |
| No. 27, Galvanized Steel..... | 6.60 | 13 oz. | 94 | 94 |
| No. 28, " " "..... | 6.50 | 12 oz. | 86 | 86 |

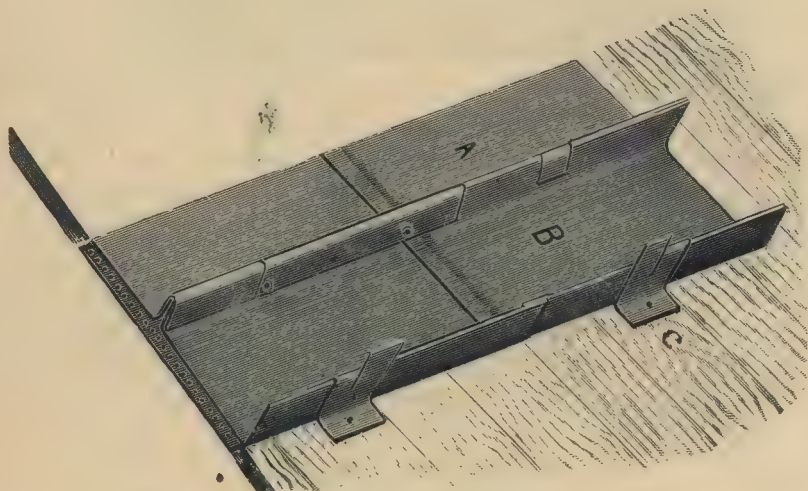
A square as shipped will cover 100 square feet on roof less waste in cutting for Hips and Valleys, etc. Price includes 45 cleats, $\frac{1}{5}$ pound $\frac{3}{8}$ No. 10 copper rivets and burs, $\frac{1}{2}$ pound 1 inch No. 10 barb wire nails, and $1\frac{1}{2}$ pounds dry paint per square. With the Roll Cap we send roofing punch and tongs, for which we charge \$7.00, and when you are through with them, return to us with tag attached, showing name of shipper, charges prepaid, and we will refund or credit you with the amount.

ILLUSTRATED INSTRUCTIONS

— FOR —

LAYING ROLL CAP ROOFING.

FIG. 73



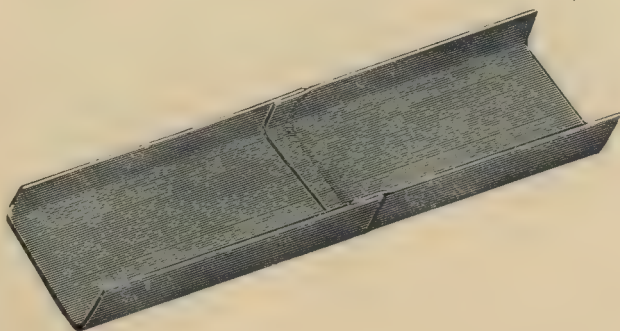
Shows two sections of iron cut from roll and put on roof.

A—First section turned over edge of roof and eave.

B—Second section cleated and partly capped and riveted to first section.

C—Standing cleat nailed to roof board and one part turned over edge of second section.

FIG. 74



Shows section of roofing with both edges turned.

FIG. 75.

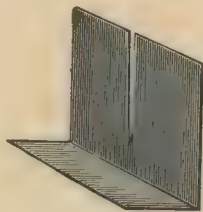
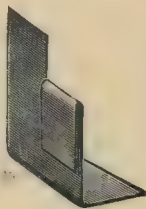


FIG 76.



75 shows standing cleat used to fasten the Roll Roofing to roof boards.
76 shows standing cleat with one part turned over.

FIG. 77



Shows separate cap used in connection with the Roll Roofing.

Cut iron from Roll right length for roof, and commence laying at eave and either side of roof you prefer. Let the iron on first course project over side and eave of roof one to two inches, as shown at A, Fig. 73, or if there are Fire Walls turn up the iron four to six inches, nail securely to the wall and counter flash as shown at A, Fig. 68. Take tongs and turn up one inch flange, as shown at Fig. 74, (tongs we send out are made to turn 1, $1\frac{1}{4}$, or $1\frac{1}{2}$ inch) or if on very flat roofs $1\frac{1}{4}$ or $1\frac{1}{2}$ inch flange on the other side of iron and fasten with cleats about every 15 inches, turning over the flange $\frac{1}{2}$ of the split part of the cleat, as shown at C, Fig. 73. Slit close to flange the projecting part of iron, bend it down, and nail to eave say every 4 inches. If a Gable Roof, turn up at ridge as shown at Fig. 65, cleating the end same as sides. Take next strip of roofing, and turn up flange on each side, as shown at Fig. 74, and put it close to strip first laid, using tongs to close the strips together, and bend the other part of cleat over flange of second strip. Continue in this manner until roof is covered. If a Gable Roof, finish up ridge as shown at Figs. 66 and 67. Take caps sent with roofing, as shown at Fig. 77, and place over the standing seams letting them lap two inches at ends and closing the caps together with tongs. Take roofing punch and punch holes at end and center of caps, and rivet the caps where punched. For cutting around chimneys, see Figs. 69, 70 and 71. For connecting to gutters, see Fig. 68 as shown at B and E. For Hips and Valleys, see page 40, as given for D. C. Roofing. When roof is laid and riveted, paint the surface thoroughly.

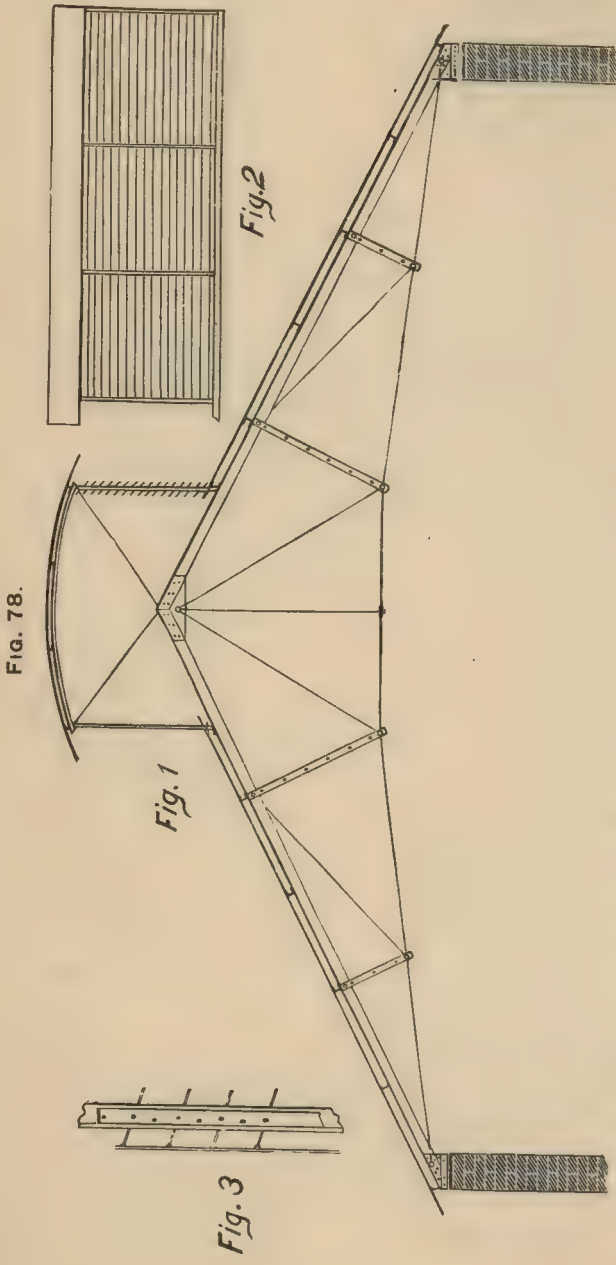


Fig. 78 shows Iron Roof Truss, with Fig. 1 end view of Ventilator ; Fig. 2 side view of Ventilator with Slats; Fig. 3 shows sectional view of Slats. Iron Roof Trusses and Iron Buildings covered with Corrugated Iron, designed and erected. Designs and estimates furnished on application.

THE BEST WATER-PROOF SHEATHING.

IN ROLLS 36 INCHES WIDE, CONTAINING 600 SQ.
FEET. WEIGHT $\frac{3}{4}$ LBS. TO SQ. YARD.

THE BEST WATER-PROOF SHEATHING MADE. IT WILL NOT SWELL OR
SHRINK FROM DAMPNES.

Is made from bagging and rag stock, and thoroughly saturated with a water-proof mixture, making it superior to all others for water-proof qualities.

Please notice that all other water-proof papers are merely sized or coated on the outside, and when exposed to the weather, or dampness, swell or rot from the inside. Every fiber of this paper being thoroughly saturated with a water-proof compound, makes it the only *sheathing that will stand when exposed to dampness.*

It can be used in all places in place of Tarred Felt, and is much more durable and is clean and free from unpleasant odor.

It can be used under Slate, Tin, Iron, Shingles, Floors and all kinds of Lining or Siding, and can be painted, white-washed, or covered with other paper.

INODOROUS AND CLEAN TO HANDLE.

It is perfectly dry and clean to handle, and is put up in nicely wrapped rolls, 36 inches wide, weighing about 50 pounds.

IT WILL PAY YOU TO USE THIS SHEATHING UNDER YOUR IRON ROOFING AND SIDING.

Price per roll, \$1.75.

ELASTIC ROOFING CEMENT.

We offer to the trade the Best of all Cements in the market, which has stood a satisfactory test of fifty years. The only reliable cement in the market, for leaky roofs, chimneys &c.; can be used on all kinds of roofing.

Tinners will find this cement superior to solder for repairing tin roofs.

Loose or broken slates can be fastened with it. Guaranteed to stand either hot or cold weather.

It is put up in $6\frac{1}{4}$ and $12\frac{1}{2}$ pound boxes. Also in cases containing sixteen $6\frac{1}{4}$ pound boxes, for the trade.

We have used your Elastic Cement in our business for over twenty-five years. We always recommend it where first class work is desired, and have used it in large quantities on many of the finest buildings which we have roofed. We have used some 50,000 lbs. during the past three years.

JOHN FARQUHARS' SONS.

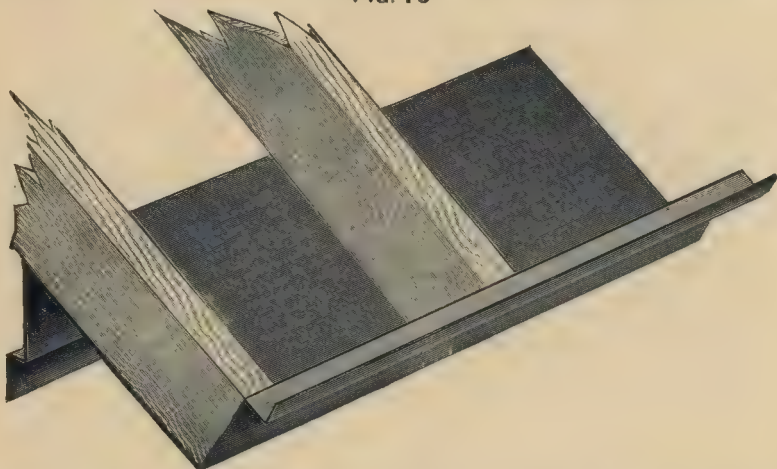
Slate, Metal and Composition Roofers, Boston, Mass.

$6\frac{1}{4}$ and $12\frac{1}{2}$ lb. boxes, per lb., - - - 12 cents.

Cases of 100 lbs. in boxes, per lb., - - - 10 "

SHEET IRON CORNICES, WINDOW CASINGS, &C.

FIG. 79



Shows section of Sheet Iron Cornice as applied on rafters. This is used largely on Grain Elevators, Foundrys and all kinds of Manufacturing Buildings. Regular lengths 48 inches, but can furnish any length up to 8 feet to suit the distance between rafters, and for any size and design of Cornice.

| PRICE LIST. | No. 26. Painted. | No. 24. Painted. | No. 26. Galvan'd. | No. 24. Galvan'd. |
|-------------------|---------------------|---------------------|----------------------|----------------------|
| | Per foot. | Per foot. | Per foot. | Per foot. |
| 24 inch Girt..... | .18 | .20 | .21 | .23 |
| 26 " "..... | .19 | .21 | .22 | .24 |
| 28 " "..... | .20 | .22 | .23 | .25 |
| 30 " "..... | .21 | .23 | .24 | .26 |

FIG. 80



Shows section of Sheet Iron Base for use as shown in Fig. 36; regular length 28 inches.

PRICE LIST.

| | | | |
|------------------------------------|---|---|----------------|
| No. 26, Painted, Girt 9 inches, | - | - | 10c. per foot. |
| No. 24, " " " " | - | - | 11c. " " |
| No. 26, Galvanized, Girt 9 inches, | - | - | 12c. " " |
| No. 24, " " " " | - | - | 13c. " " |

FIG. 81.



Shows Sheet Iron Window Casing, for Casing Window Frames; regular length 28 inches.

| PRICE LIST. | No. 26. Painted. | No. 24. Painted. | No. 26. Galvan'd. | No. 24. Galvan'd. |
|------------------|---------------------|---------------------|----------------------|----------------------|
| | Per foot. | Per foot. | Per foot. | Per foot. |
| 3 inch face..... | .09 | .10 | .10 | .11 |
| 4 " " | .10 | .11 | .11 | .12 |
| 5 " " | .11 | .12 | .12 | .13 |

3 inch face Girt $6\frac{1}{2}$ inches.

| | | |
|-----------|----------------|---|
| 4 " " " " | $7\frac{1}{2}$ | " |
| 5 " " " " | $8\frac{1}{2}$ | " |

FIG. 82



Shows Sheet Iron Door Casing and Jamb, for use in Casing Door Frames; regular length 28 inches.

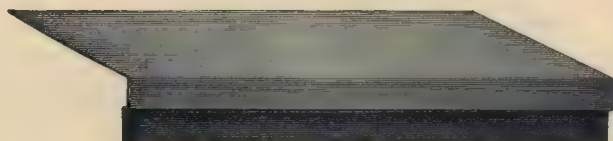
| PRICE LIST. | No. 26. Painted. | No. 24. Painted. | No. 26. Galvan'd. | No. 24. Galvan'd. |
|-------------------|---------------------|---------------------|----------------------|----------------------|
| | Per foot. | Per foot. | Per foot. | Per foot. |
| 3 inch face. | .12 | .13 | .13 | .14 |
| 4 " " | .13 | .14 | .14 | .15 |
| 5 " " | .14 | .15 | .15 | .16 |

3 inch face, Girt 12 inches.

4 " " " 13 "

5 " " " 14 "

FIG. 83



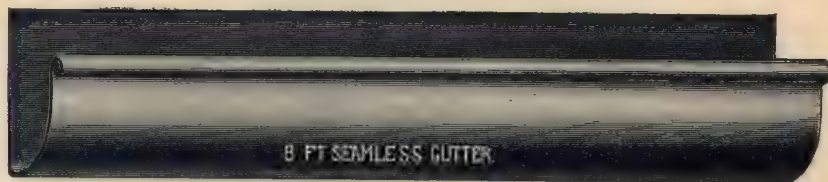
Shows Sheet Iron Window Sill for use in covering sills of windows. Made to order in lengths to fit the sill of windows.

PRICE LIST.

| | | | | |
|-----------------------------------|---|---|---|----------------|
| No. 26, Painted, Girt 9 inches, | - | - | - | 10c. per foot. |
| No. 24, " " 9 " " | - | - | - | 11c. " |
| No. 26, Galvanized, Girt 9 inches | - | - | - | 12c. " |
| No. 24, " " 9 " " | - | - | - | 13c. " |

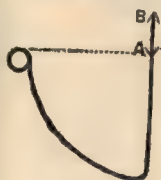
GALVANIZED IRON GUTTERS.

FIG. 84



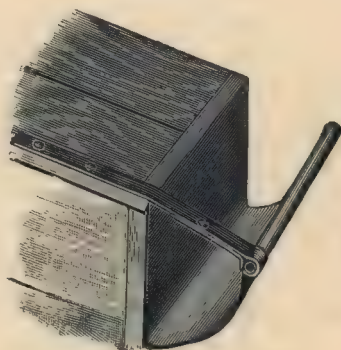
Shows section of Quarter Circle eight feet Seamless Galvanized Iron Gutter.

FIG. 85.



Shows end view of quarter circle gutter, showing flange at A B to turn over on roof.

FIG. 86.



Shows section of Quarter Circle Gutter put up with iron strap fastener.

| PRICE LIST. | | | | | 26 iron. | 24 iron. | 22 iron. | Flange A. B. |
|-------------|------|---------|--------|---------|-----------|-----------|----------|--------------|
| | | | | | Per Foot. | Per Foot. | | |
| 4 | inch | quarter | circle | Gutter, | .25 | .26 | | 3½ in. |
| 4½ | " | " | " | " | .26 | .27 | | 3½ in. |
| 5 | " | " | " | " | .29 | .30 | | 3½ in. |
| 5½ | " | " | " | " | .31 | .33 | | 4½ in. |
| 6 | " | " | " | " | .34 | .36 | .42 | 4½ in. |
| 7 | " | " | " | " | .36 | .38 | .44 | 4 in. |
| 8 | " | " | " | " | .38 | .40 | .47 | 3½ in. |
| 9 | " | " | " | " | .42 | .44 | .52 | 4½ in. |

Galvanized Iron Fasteners, per 100 \$12.00.

$\frac{5}{8}$ inch bead on 4, 4 $\frac{1}{2}$, 5 and 5 $\frac{1}{2}$ inch.

$\frac{7}{8}$ inch bead on 6, 7, 8 and 9 inch.

22 Iron Gutters all have $\frac{7}{8}$ bead.

(NOTE—Size taken INSIDE of Bead.)

When not otherwise ordered we ship gauge 26 iron.

All joints should be well riveted and soldered ; it is the only way to do first-class work.

If gutters are formed to pitch add..... per foot extra.

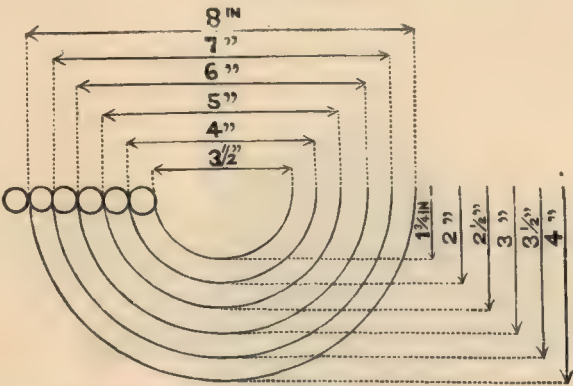
GUTTERS OF ANY DESIGN MADE TO ORDER.

FIG. 87



Shows section of Half Round eight feet Seamless Galvanized Iron Gutter.

FIG. 88



Shows end view, showing shape and sizes made.

| PRICE LIST. | | | | | 26 iron. | 24 iron. |
|-----------------|------|------|-------|-------------|-----------|-----------|
| | | | | | Per foot. | Per foot. |
| 3 $\frac{1}{2}$ | inch | half | round | Gutter..... | .13 | .14 |
| 4 | " | " | " | "..... | .14 | .15 |
| 5 | " | " | " | "..... | .16 | .17 |
| 6 | " | " | " | "..... | .18 | .19 |
| 7 | " | " | " | "..... | .20 | .21 |
| 8 | " | " | " | "..... | .21 | .22 |
| | " | " | " | "..... | | |
| | " | " | " | "..... | | |

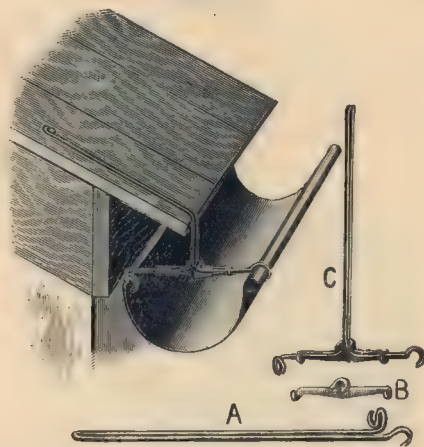
All the above Gutters have $\frac{5}{8}$ inch bead.

When not otherwise ordered we ship gauge 26 iron.

NOTE—Size taken INSIDE of Bead.

GUTTER FASTENERS.

FIG. 89



Shows the Universal Gutter Fastener.

A—Fastener as shipped.

B—Clamping Brace.

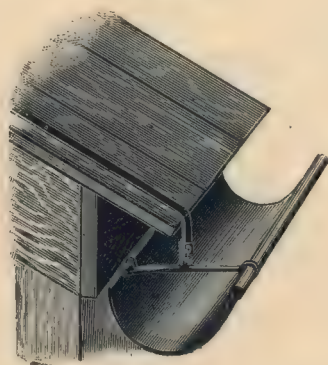
C—Fastener formed to size.

In use over nine years. Gives the best of satisfaction. Will fit all sizes of Gutter. It is a combination of a double Galvanized Bessemer Steel Wire and strengthening brace.

PRICE LIST.

| | | | | |
|---------------------------------------|---|---|---|---------|
| Galvanized, including Brace, per 100, | - | - | - | \$4.25. |
| Machine for forming, | - | - | - | .50. |
| Pincers, | - | - | - | .20. |

FIG. 90



Shows the Triumph Gutter Fastener. In use over eleven years. Has been greatly improved, and with the "Patent Perforated Rivet Hole," the strap can be fastened by using a small nail. This saves fully one-third in labor putting on, as one man can put the cross bars on the Gutter while another bends the straps.

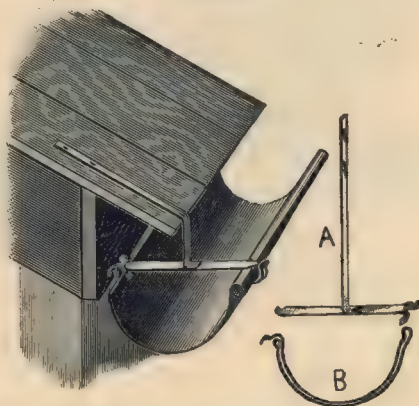
PRICE LIST, TRIUMPH FASTENER.

Always order by number.

No. 1— $3\frac{1}{2}$ inches inside Bead, per 100, - - - \$4.25.

No. 2—5 " " " " " - - - 5.25.

FIG. 91



PATENT ALLOWED JULY, 1897.

Shows our Self-locking Gutter Fastener.

A—Cross Bar with strap riveted on.

B—Galvanized Wire Circle to pass under Gutter and fastens to cross bar with patent Self-lock.

We are confident that this Fastener will prove the best article for the purpose ever offered, as the circle is made of wire, allowing no chance for corrosion under the gutter, as in the case where straps are used. Where parties prefer, they can use the Woodruff rod instead of the strap riveted on the cross bar.

PRICE LIST.

Always order by numbers.

No. 1— $3\frac{1}{2}$ inches inside Bead, per 100, - - - \$4.25.

No. 2—4 " " " " " - - - 4.50.

No. 3—5 " " " " " - - - 5.25.

No. 4—6 " " " " " - - - 6.25.

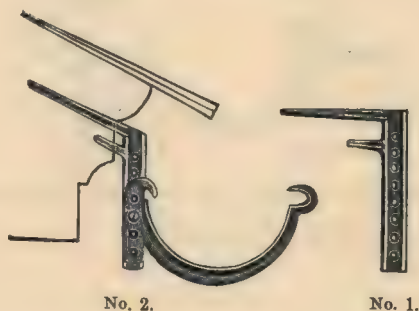
No. 5—7 " " " " " - - - 6.50.

No. 6—8 " " " " " - - - 7.00.

ADJUSTABLE DRIVE IRONS.

PATENTED OCTOBER 14, 1879.

FIG. 92.



No. 2.

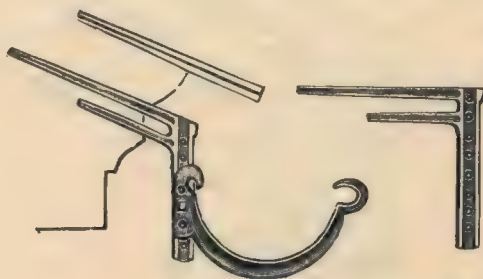
No. 1.

No. 1 Irons are made to drive square in the cornice from 3 to 4 inches. The lower prong forms a brace for the upper, and makes it very strong and firm.

No. 2 is to drive with the pitch of the roof.

For crooked eaves, drive and bolt the irons to a line.

FIG. 93.



No. 4.

No. 3.

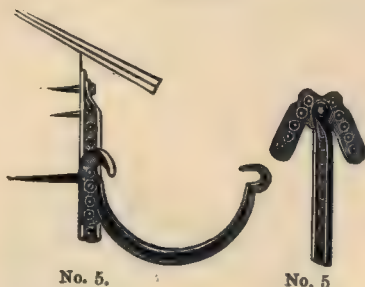
No. 3 Irons are made to drive from 3 to 6 inches square in the cornice, the lower prong forming a brace for the upper. This Iron is intended for eaves where the shingles project far over the cornice.

No. 4 drives with the pitch of the roof.

ADJUSTABLE FRONT IRONS.

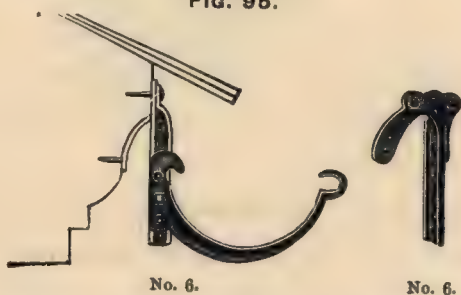
PATENTED OCTOBER 14, 1879.

Fig. 94.



No. 5 is made to nail against square box cornices, and is especially adapted to barns, mills and factories.

Fig. 95.

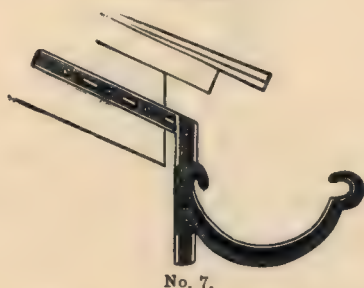


No. 6 Irons are made especially to nail against O. G. mouldings. The two stays are made to fit in the cove, and can be bent to suit any variation.

ADJUSTABLE RAFTER IRONS.

PATENTED OCTOBER 14TH, 1879.

Fig. 96.

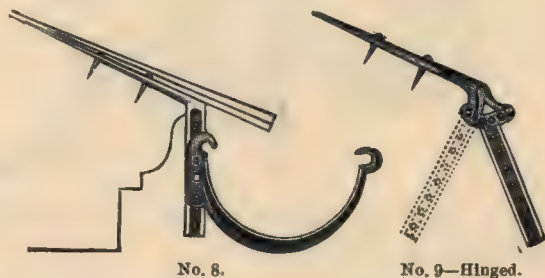


No. 7 Irons are specially adapted to barns, mills and factories, where the rafters are exposed. The shank is nailed to the side of the rafter, assorting the 4, 6½ and 9 inch shank to correspond with the amount of fall required.

ADJUSTABLE ROOF IRONS

PATENTED OCTOBER 14TH, 1879.

FIG. 97.

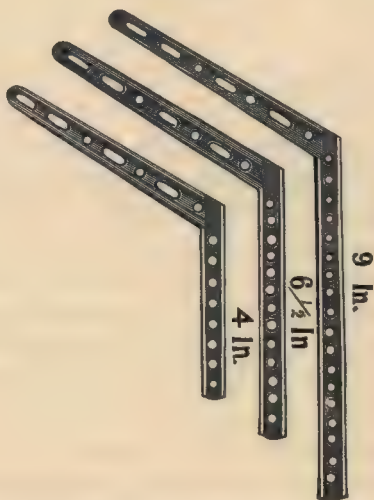


No. 8.

No. 9—Hinged.

No. 8 Irons are made $\frac{1}{2}$ pitch to fasten under the roofing, and are easily bent to more or less pitch. The holes on top of the Shank are made beveling so that the nail can be driven at any point and enter the Shank. No. 9 Hinged Shank can be adjusted to any desired pitch of roof.

FIG. 98



Shows lengths of assorted Shanks to be used in giving the required fall to gutters.

FIG. 99



Shows some of the different degrees of roof pitch that can be obtained by the use of No. 9. Hinged Shanks.

PRICE LIST.

Put up 50 in a package.

| | | | | | | |
|------------------------------------|------------------|---|---|---|---|---------|
| Shanks Nos. | 1 or 2, per 100, | - | - | - | - | \$4.00. |
| " " | 3, 4 or 5, | " | - | - | - | 6.00. |
| " " | 6, 7 or 8, | " | - | - | - | 7.00. |
| " " | 9, Hinged, | " | - | - | - | 8.00. |
| Circles, $3\frac{1}{2}$ or 4 inch, | " | " | - | - | - | 4.00. |
| " 5 | " | " | - | - | - | 6.00. |
| " 6 | " | " | - | - | - | 8.00. |
| " 7 or 8 | " | " | - | - | - | 10.00. |

Shanks and Circles are listed separate for convenience in arranging list, and for those who order assortments not evenly matched. Note that all Shanks are numbered, and size of circles given. In ordering, state quantity and number of Shanks and size of Circles wanted. Please note the advantages in the different styles to suit the different modes of fastening. They can be adjusted to any fall of the Gutter desired, as the holes in the Circles are so arranged that when one is even with those in the Shank for the bolt, the next is part way over another, thus giving a fine uniform fall to the Gutter.

They are endorsed by all architects for first-class work, where strength, neatness and durability is required, as the Gutter is free of all bars and cannot choke up or burst. They are used by all the leading tanners throughout the country, and acknowledged to be the best and most practical trough irons ever invented.

The late improved Circles have four bolt holes to drop every $\frac{1}{8}$ or $\frac{1}{4}$ inch and extend around over the head. The Gutter is fastened down inside with doubled wire hooked in, and both points bend down over the Gutter complete

For Gutters close up to the shingles, slip a hooked wire up from below and fasten to the Shank.

CORRUGATED EXPANDING CONDUCTOR GALVANIZED.

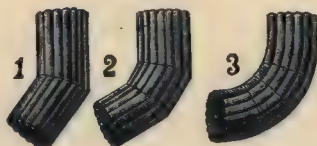
FIG. 100.



FIG. 101.



FIG. 102.



PRICE LIST. REGULAR SIZES.

| ROUND. | Per foot. | SQUARE. | Per foot. |
|-------------|-----------|--|-----------|
| 2 inch..... | 12c. | 1 $\frac{3}{8}$ x2 $\frac{1}{4}$, Gal. Iron, equal to 2 in. R'd.... | 12c. |
| 3 "..... | 15c. | 2 $\frac{1}{8}$ x2 $\frac{3}{8}$, " " 3 "..... | 15c. |
| 4 "..... | 20c. | 2 $\frac{5}{8}$ x3 $\frac{5}{8}$, " " 4 "..... | 20c. |
| 5 "..... | 25c. | 3 $\frac{1}{4}$ x4 $\frac{1}{2}$, " " 5 "..... | 25c. |
| 6 "..... | 30c. | 3 $\frac{3}{8}$ x5 $\frac{1}{4}$, " " 6 "..... | 30c. |

ELBOWS AND SHOES.

ROUND OR SQUARE.

| SIZES. | No. 1 per doz. | No. 2 per doz. | No. 3 per doz. |
|----------|-------------------|-------------------|-------------------|
| 2 inch.. | \$2.50 | \$3.00 | \$3.50 |
| 3 " .. | 2.75 | 3.25 | 3.75 |
| 4 " .. | 3.50 | 4.00 | 4.50 |
| 5 " .. | 4.25 | 4.75 | 5.25 |
| 6 " .. | 4.75 | 5.25 | 5.85 |

In ordering Elbows and Shoes,

parties will please state the angles required accordingly as numbered in Fig. 102.

Our EXPANDING CONDUCTOR is manufactured of the Best Material, (made expressly to our order,) and as it is Galvanized after formation, the seams are not only Double Locked and Grooved, but also Soldered, through the process of Galvanizing.

We furnish it to the Trade in Nine Feet Lengths, for convenience in handling, and each length is reduced at one end, making the connection both simple and easy.

We ship in Skeleton Crates. A Crate containing a given number of feet of 6 inch Conductor, will also carry a similar quantity of 5, 4, 3 and 2 inch, one packed within the other, which is a decided advantage to parties ordering, as it reduces the freight to a nominal sum.

For DURABILITY, STRENGTH and CHEAPNESS, we guarantee it equal to any CONDUCTOR IN THE MARKET.

CONDUCTOR HOOKS. FOR BRICK.

FIG. 103.



PRICE LIST.

| | | | | | | | |
|------------------|---|---|---|---|---|---|----------|
| 2 inch, per 100, | - | - | - | - | - | - | \$ 3.50. |
| 3 " " | - | - | - | - | - | - | 5.50. |
| 4 " " | - | - | - | - | - | - | 8.50. |
| 5 " " | - | - | - | - | - | - | 12.00. |
| 6 " " | - | - | - | - | - | - | 16.00. |

All Hooks tinned with lead process and warranted not to rust.

FIRE-PROOF DOORS AND SHUTTERS.

FIG. 104.



Shows the style of Shutter, with fastenings, we manufacture. The body of these are made of wood and covered each side with our Beaded Iron, which projects an inch at top and sides of Shutter, and is riveted every three inches. The experience of the past few years has demonstrated to a certainty that Shutters and Doors constructed in this manner have stood the test of extreme heat much better than solid iron.

Mr. James Harrison, superintendent of the Bureau of Surveys in the New York Board of Fire Underwriters, not long ago indorsed on a specification of a building about to be erected, as follows :

Construction of doors and shutters herein described approved by the Board of Fire Underwriters. Batten doors covered with metal, have been commended and preferred to iron doors for a long time.

We will quote Special Prices on Doors and Shutters, if parties wanting them will state size and number wanted.

THE CLINTON METALLIC PAINT.

(RED OXIDE OF IRON.)

FIG. 105



Shows "Trade Mark" of the Clinton Metallic Paint. We know this to be one of the best Metallic Paints in the market, and have adopted the use of it for painting all our iron for the following reasons :

It is manufactured from the well-known Clinton New York iron ore which has been long used in the production of a superior grade of pig iron. It has been for a number of years subjected to the severest practical tests, always with the most satisfactory results. It contains a large amount of iron. It is free from sulphur or other injurious matter. It is of good color. It has a strong body. It mixes well with the oil and does not settle. It works smoothly under the brush and spreads well. It does not fade.

It is the best and most durable paint for roofs, houses, barns, fences, railroad cars, bridges, brick fronts and ALL OUTSIDE WORK either of wood or metal. It is GUARANTEED free from any adulteration whatever.

Put up Dry in 100 lb. Kegs, and in Barrels of 400 lbs. No charge for packages and branded with actual net weight.

Also put up ready for use and mixed with Pure Linseed Oil in 1, 2, 3, 5, 10, 25, and 50 Gallon Packages.

PRICE LIST.

MIXED.

| | | | |
|----------------------|-----------------|---------------------|-----------------|
| 1 Gallon Package... | \$1.50 per Gal. | 5 Gallon Package... | \$1.35 per Gal. |
| 2 " " ... | 1.45 " " | 10 " " ... | 1.30 " " |
| 3 " " ... | 1.40 " " | 25 " " ... | 1.25 " " |
| 50 Gallon Package... | | \$1.20 per Gal. | |

But one color made, RED. None Genuine without Trade Mark.

PRICE LIST.

DRY.

| | | | | | | | |
|-------------------------|---|---|---|---|---|---|---------------|
| Per Ton in Bbls., | - | - | - | - | - | - | \$30.00. |
| Per Bbl. of 400 Pounds, | - | - | - | - | - | - | per Lb., 1½c. |
| Per Keg of 100 Pounds, | - | - | - | - | - | - | per Lb., 2 c. |

DIRECTIONS FOR ORDERING.

IRON ROOFING, SIDING AND CEILING.

For straight or plain ceilings give exact size. Also say in which direction you wish length of sheets to run. If iron is to be applied to joists give distance between centers.

When ordering Corrugated or Crimped for Ridge Roof, state if we shall ship Ridge Roll, or Ridging for length of Ridge.

When ordering Corrugated or Beaded for siding, state if we shall ship Corner Roll to finish up corners of building.

When ordering Corrugated, Crimped or Beaded, say whether the iron is to be used on boarding or direct to Rafters or Studding, and be careful to state what kind of Roofing or Siding you want ; the number of Iron, whether painted or galvanized ; the size of Corrugate—if Corrugated is ordered. A little attention to this may save delays in shipment, and enable us to fill your orders more prompt.

Orders for heavy numbers of Corrugated, Crimp and Beaded and odd lengths of all numbers should be sent in three or four weeks before wanted.

A practical experience of some 18 years shows us that the proper place to cut Iron to fit around openings, etc., is when the Iron is being applied. We therefore make no attempt to cut to fit, knowing the impossibility of giving satisfaction to our customers.

When ordering Roofing, Siding or Ceiling fill out diagram like one of the following and enclose with order.

FIG. 106.

For Ridge Roof.

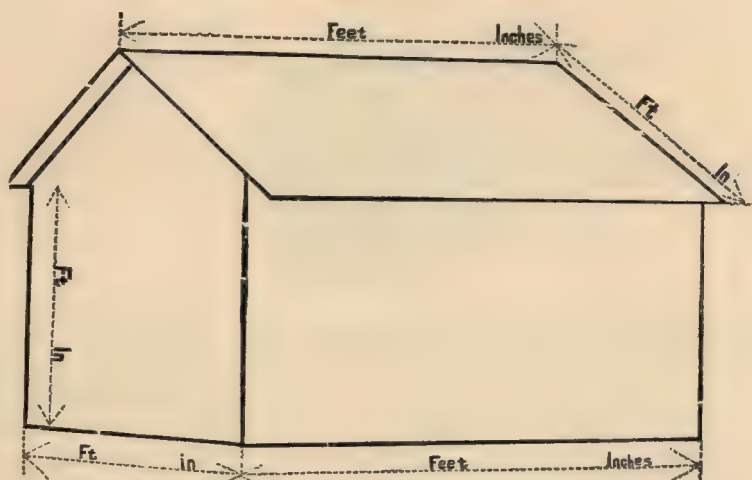
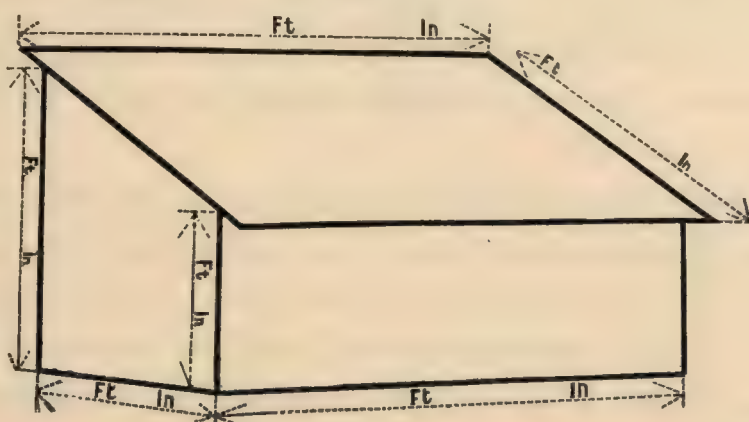


FIG. 107.

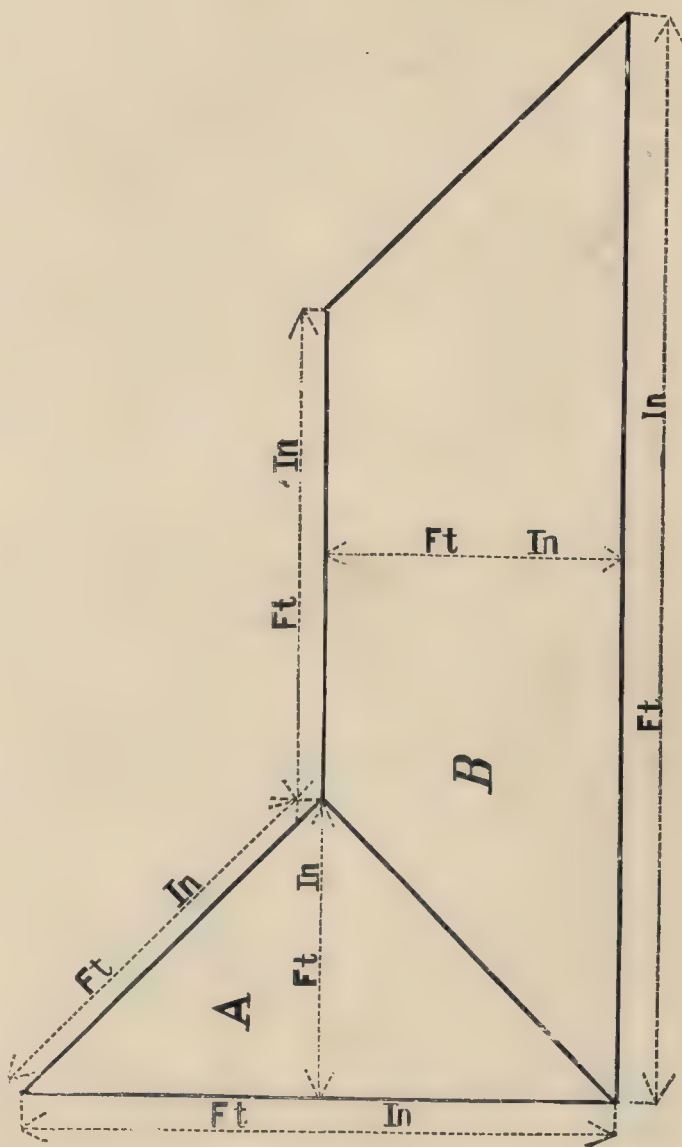
For Shed Roof.



If for Roofing only, fill out diagram of roof. If for Siding only fill out diagram of sides. If for Roofing and Siding, fill out all of the proper diagram. Make allowance for projections.

FIG. 108.

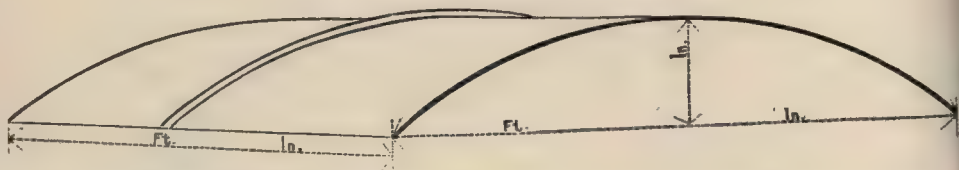
For Gables and Hip Roofs.



If for Gables, fill out part of diagram marked A. If for Hip Roof, fill out all of diagram.

FIG. 109.

For Curved Corrugated Iron.



If for ceiling, give exact distance between webs of I Beams, rise of sheet, and length and number of sections.

If for Roofing, give number and length of sheets, and radius required.

When ordering Fire-Proof Shutters or Doors, fill out diagram like one of the following and inclose with order.

FIG. 110.

For square head Windows or Doors.

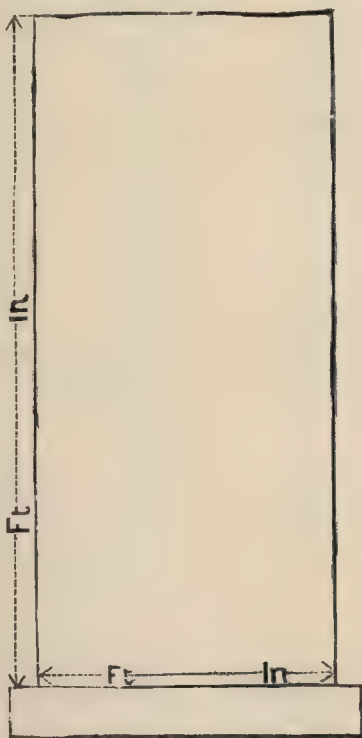
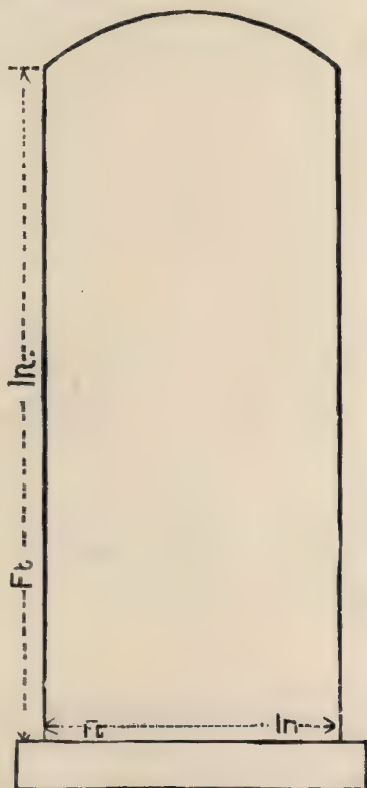


FIG. 111.

For circle head Windows or Doors.



Give exact length and width of openings in feet and inches as shown on above diagrams. For circle heads give rise of arch. Be careful to state the number of each size wanted.

ILLUSTRATIONS

— OF —

ROLLING MILLS AND GRAIN ELEVATORS.

SHOWING SOME OF OUR CONTRACTS

DURING THE PAST NINETEEN YEARS.

All of these contracts were under the direct supervision of our Mr.
E. N. Thompson.



LAKE ERIE IRON MILL, CLEVELAND, OHIO.

LAKE ERIE IRON MILL.

CLEVELAND, O.

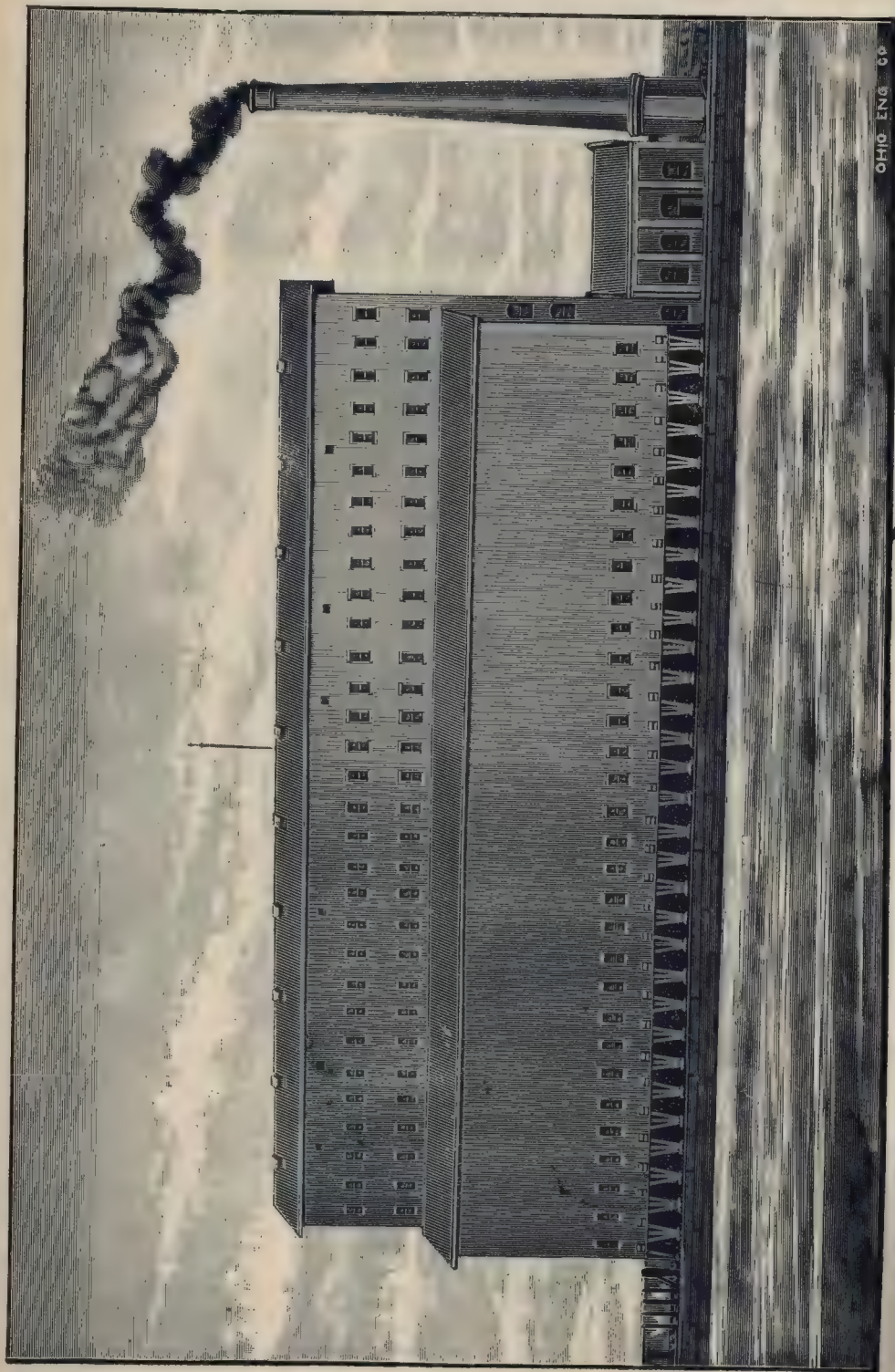
From a photograph taken by R. F. Krumhar & Co., of this city, in
June, 1887.

John T. Watterson, Cleveland, O., Architect and Contractor.

Erected winter of 1873.

Our contract for the iron covering on this mill amounted to 56,800 square feet No. 22 Crimped Iron on the roof, and 25,000 square feet of No. 24 plain iron on the sides.

Roof was recovered by us in October, 1880, with No. 20 Crimped Iron.



OHIO ENG. CO.

TOLEDO AND WABASH ELEVATOR, No. 4, TOLEDO, OHIO.

TOLEDO AND WABASH ELEVATOR, NO. 4

TOLEDO, OHIO.

From a photograph taken by McKecknie & Oswald, Toledo, O., in March, 1885.

Capacity, 1,400,000 bushels.

Iron covering was put on by us July and August, 1874. The amount used was 65,800 square feet of No. 24 Corrugated Iron Siding covering the main sides and ends from foundation to eaves of bin roof.

TOLEDO & WABASH ELEVATOR COMPANY.

ELEVATOR OFFICE.

J. S. DICKINSON,

TOLEDO, O., February 23, 1882.

Superintendent.

To MOSER & THOMPSON.

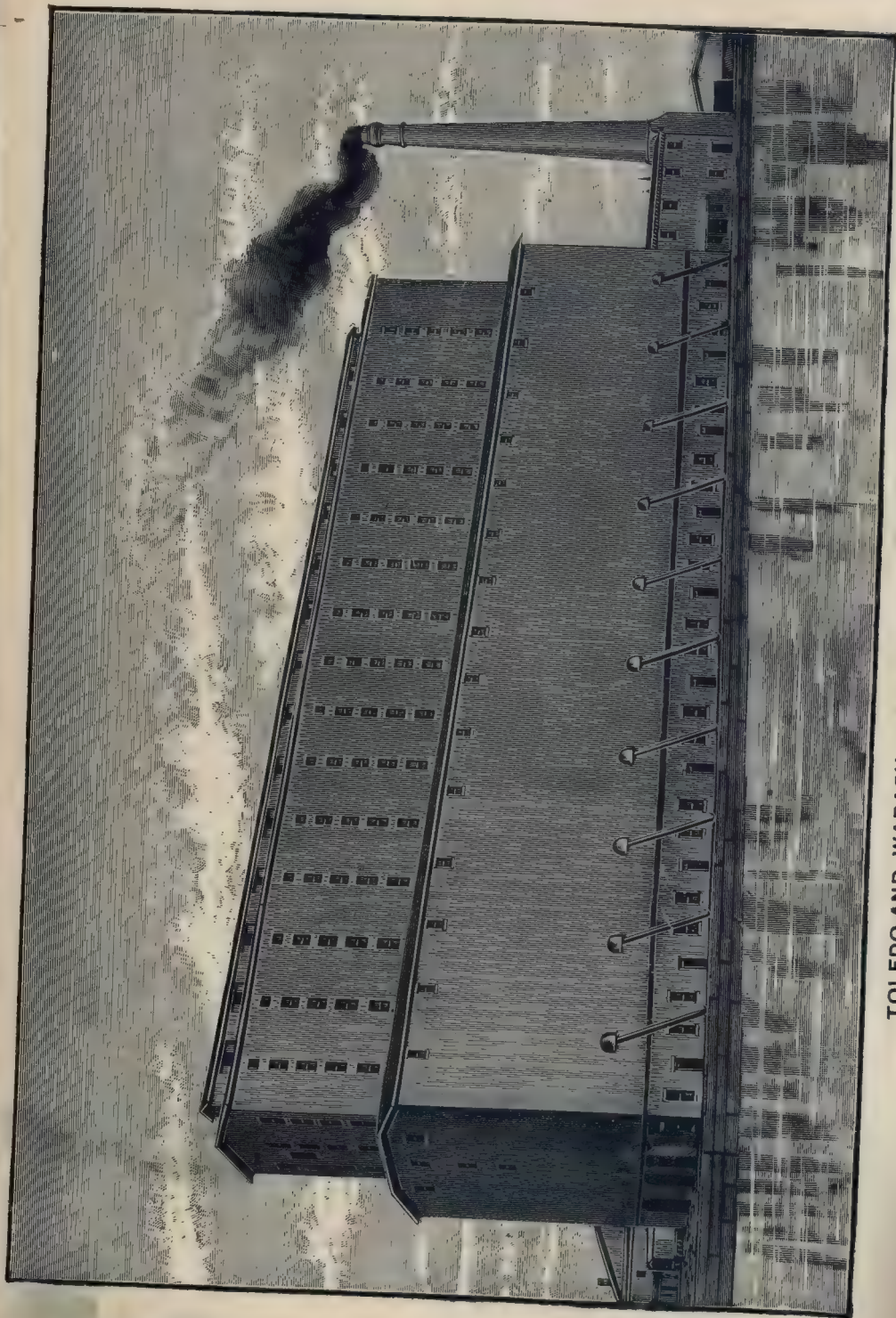
Cleveland, O.

Gentlemen :—Yours of the 21st at hand. All our elevators are covered on sides and ends with Corrugated Iron, painted with iron ore paint. This covering, part of which was done by you, gives good satisfaction, and can cheerfully recommend it. That put on by you has stood the test for about 8 years and is still good. I can recommend your firm as reliable for good work.

Truly yours,

J. S. DICKINSON,

Supt.



TOLEDO AND WABASH ELEVATOR No. 5, TOLEDO, OHIO.

TOLEDO AND WABASH ELEVATOR, NO. 5.

TOLEDO, OHIO.

From a photograph by McKecknie & Oswald, March, 1885.

Capacity, 1,700,000 bushels.

Architects and contractors, J. T. Moulton & Son, Chicago, Ill.

Our contract for the iron and tin covering on No. 5 took the following amounts:

80,000 square feet No. 24 Corrugated Iron Siding.

43,000 " " Tin Siding.

46,000 " " " Roofing.

2,550 lin. feet Iron Cornice.

6,500 " " " Door and Window Casings.

870 " " " Water Table.

700 " " " Base.

J. T. MOULTON & SON,

J. T. Moulton.

GRAIN ELEVATOR

Geo. M. Moulton.

ARCHITECTS, CONTRACTORS AND BUILDERS.

CHICAGO, February 18, 1882.

Mess. MOSER & THOMPSON,

28 River St.,

Cleveland, Ohio.

Gentlemen:—We congratulate you upon the successful completion of your large contract with us for the tin and corrugated iron covering of the Toledo & Wabash Elevator, No. 5, at Toledo, O. It gives us pleasure to commend the excellency of the work done by you there, and we trust that our business relations thus pleasantly begun may continue in the future. We shall be pleased at all times to recommend your work to any who may inquire of us.

Yours very truly,

J. T. MOULTON & SON.



BOTSFORD'S ELEVATOR, No. 1, PORT HURON MICH.



BOTSFORD'S ELEVATOR, No. 2. PORT HURON, MICH.

BOTSFORD'S ELEVATOR, NO. 1,

PORT HURON, MICH.

The iron covering on this elevator was put on by us in May, 1880, and consisted of 27,500 square feet of No. 26 Double Cap Roofing, and No. 26 Corrugated Iron Siding.

This elevator was burned down in 1881.

J. E. & W. F. BOTSFORD,
GRAIN DEALERS
AND COMMISSION MERCHANTS.

PORT HURON, MICH., January 20, 1882.

Mess. MOSER & THOMPSON,

Cleveland, O.

Gentlemen :—We take pleasure in saying that the thorough and workmanlike manner in which you have covered two grain elevators for our firm warrants us in recommending your iron and work to any one wanting a first-class job in every respect.

Yours very respectfully,

J. E. & W. F. BOTSFORD.

BOTSFORD'S ELEVATOR, NO. 2,

PORT HURON, MICH.

The iron covering on this elevator was put on by us in December, 1881, and the following amounts of iron were used :

| | | | |
|--------|-------------|------------------------|-------------------------------------|
| 13,000 | square feet | No. 26 Corrugated Iron | on sides. |
| 6,000 | " | " | No. 26 Beaded Iron on cupola sides. |
| 6,000 | " | " | Double Cap Roofing on roof. |
| 700 | lin. | " | Iron Cornice. |

All door and window casings covered with iron.



UNION ROLLING MILL, CLEVELAND, OHIO.

UNION ROLLING MILL,

CLEVELAND, OHIO.

From a photograph taken by R. F. Krumbar & Co.,

June, 1887,

Architect and contractor,

John T. Watterson, Cleveland, Ohio.

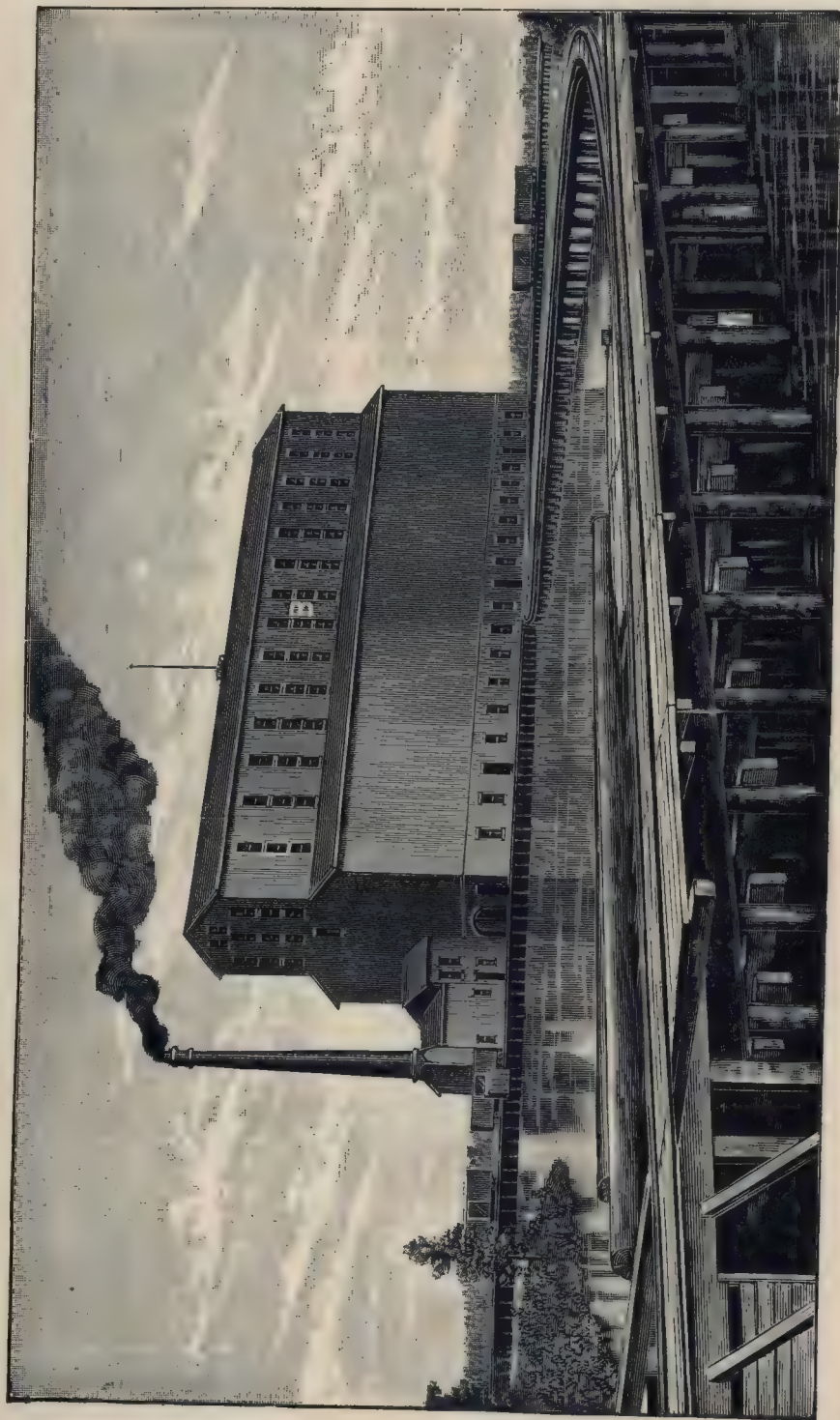
The iron covering was put on this mill by us during the winter of 1884.

The material used was

56,100 square feet No. 20 Crimped Iron on roof.

27,000 " " No. 22 Plain Iron on sides.

All the iron was laid on rafters and studding direct without sheathing boards.



LAKE SUPERIOR ELEVATOR "B," DULUTH, MINN.

THOMPSON MANUFACTURING CO.

LAKE SUPERIOR ELEVATOR "B."

DULUTH, MINN.

From a photograph taken in 1880.

Capacity, 1,000,000 bushels.

Architects and contractors, J. T. Moulton & Son, Chicago, Ill.

Our contract was for the covering of the entire sides and ends of both main building and cupola with corrugated iron and was put on by us in the summer of 1881. We used

83,600 square feet of No. 26 Corrugated Iron.

3,000 lineal " " Iron Door and Window Casing.

T. B. CASEY, President.

C. H. GRAVES, }
R. S. MUNGER, } Vice Presidents.

C. MARKELL, Secretary.
GEO. SPENCER, Treasurer.

OFFICE OF

LAKE SUPERIOR ELEVATOR COMPANY.

DULUTH, MINN., March 20, 1882.

Mess. MOSER & THOMPSON,

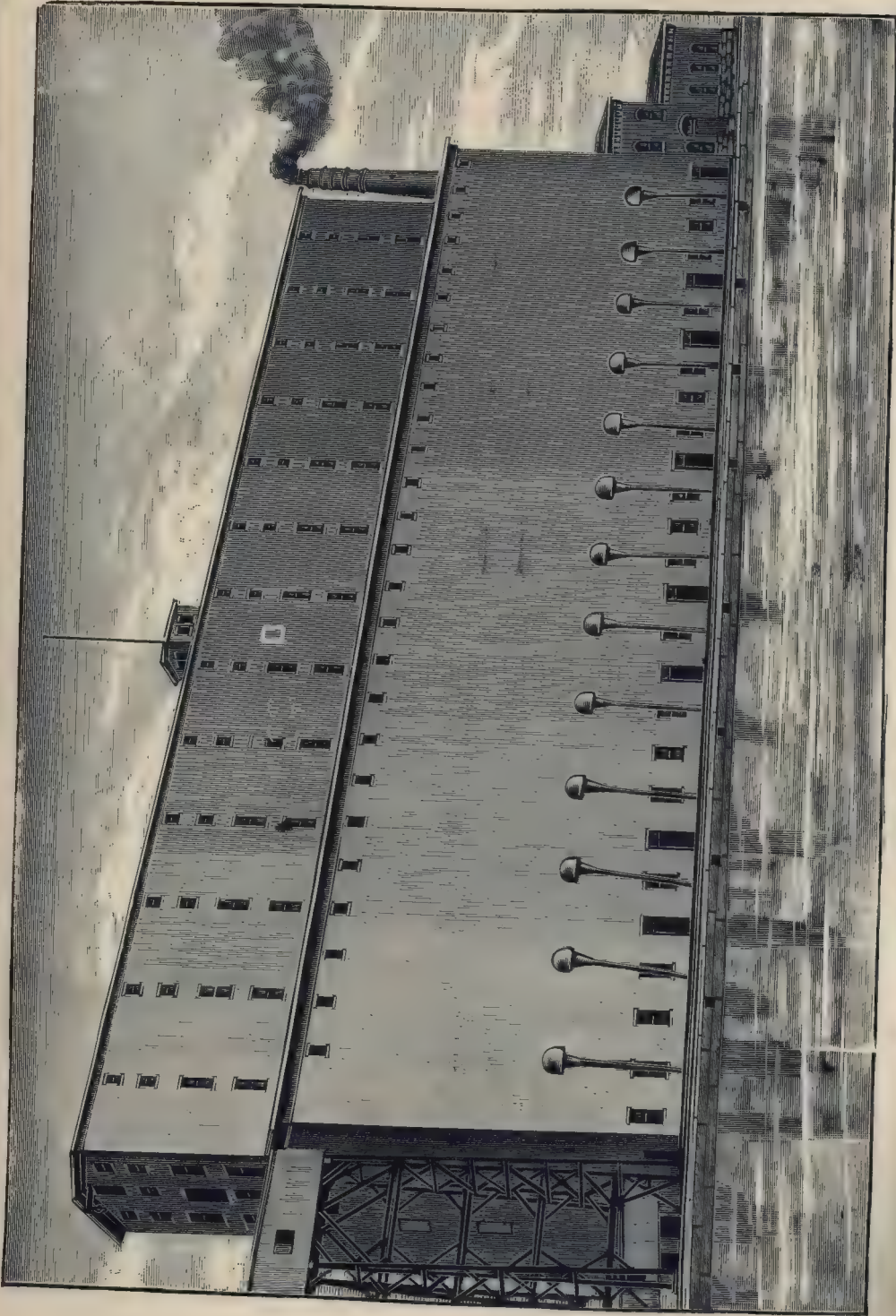
Cleveland, O.

Gentlemen :— We take pleasure in saying that the iron covering put on our Elevator "B" by you, here, has given us entire satisfaction. We shall be pleased to recommend your work at any time.

Very truly yours,

LAKE SUPERIOR ELEVATOR Co.,

Geo. Rupley, Supt.



LAKE SUPERIOR ELEVATOR "D" DULUTH MINN.

LAKE SUPERIOR ELEVATOR "D,"

DULUTH, MINN.

From a photograph taken March, 1887.

By Edward H. Foster, Duluth, Minn.

Capacity, 1,200,000 bushels.

Architects and contractors, J. T. Moulton & Son, Chicago, Ill.

Our contract on this elevator was for the iron covering on main building from foundation to eave of bin roof, and all cornices. In this contract we used

62,000 square feet No. 24 Corrugated Iron Siding.

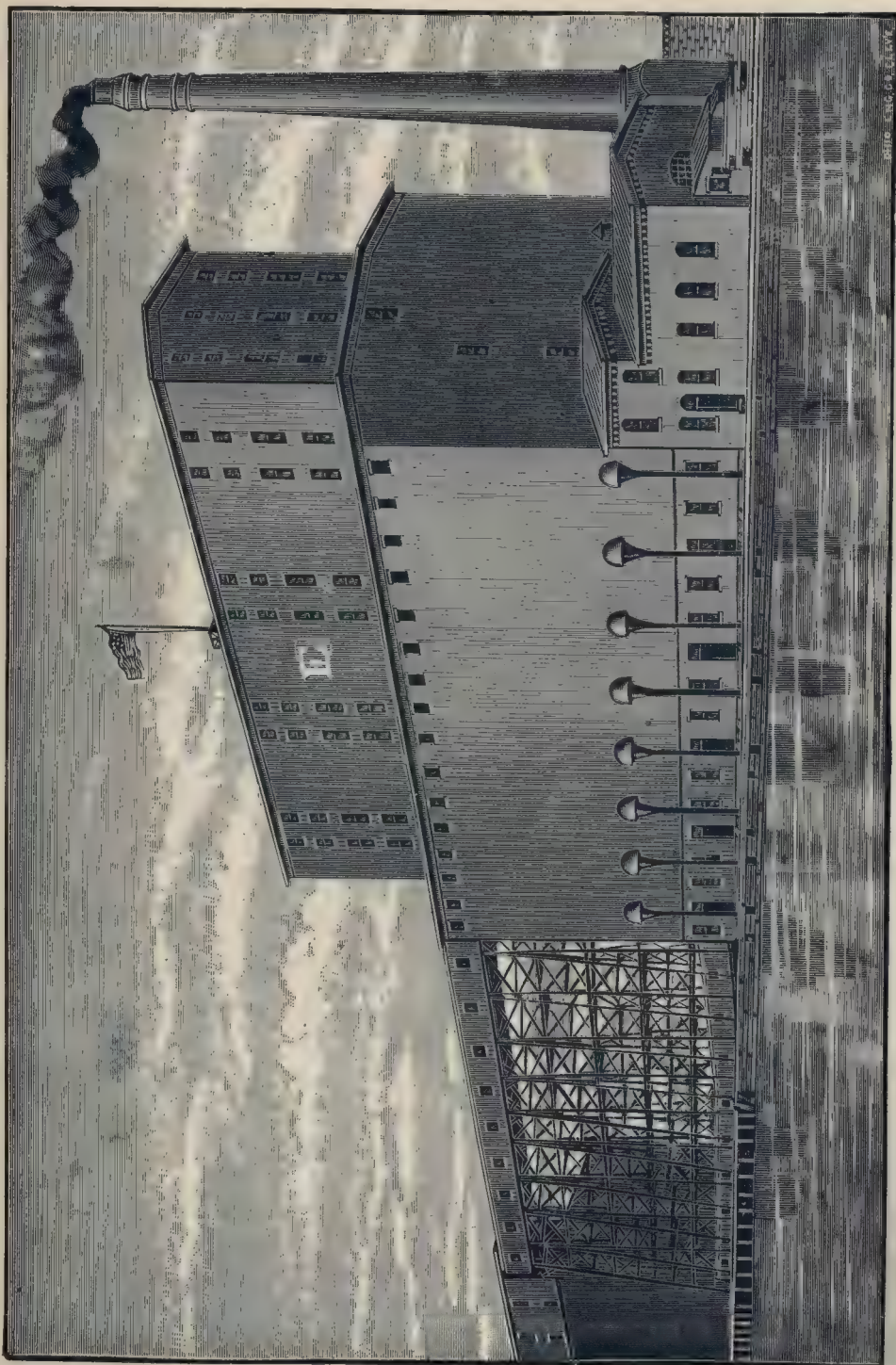
1,744 lineal " No. 24 Iron Cornice.

755 " " No. 24 " Water Table.

650 " " No. 18 " Base.

3,040 " " No. 24 " Door and Window Casings.

This covering was put on by us in October and November, 1884.



UNION IMPROVEMENT AND ELEVATOR CO., "E." DULUTH, MINN.

UNION IMPROVEMENT AND ELEVATOR CO "E."

DULUTH, MINN.

From a photograph taken March, 1887,

By Edward H. Foster, Duluth, Minn.

Capacity 800,000 bushels.

Architects and Contractors, J. T. Moulton & Son, Chicago, Ill.

Our contract on this elevator was for the iron covering on main building from foundation to eave of bin roof and all cornices. In this contract we used

43,600 square feet No. 24 Corrugated Iron Siding.

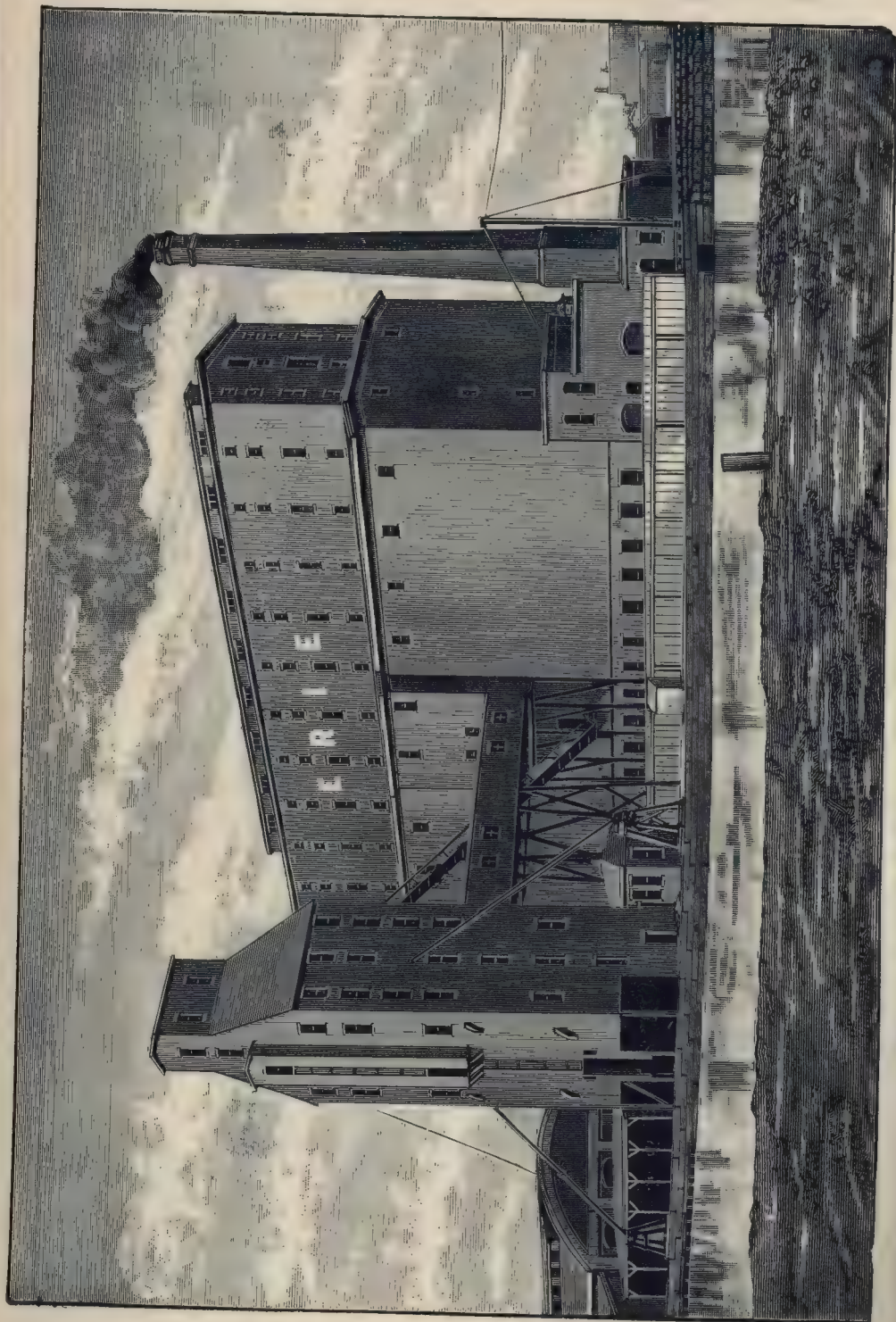
1,275 lineal " No. 24 Iron Cornices.

520 " " No. 24 " Water Table.

430 " " No. 18 " Base.

2,020 " " No. 24 Door and Window Casings.

This covering was put on by us in October and November, 1884.



NEW YORK, LAKE ERIE & WESTERN "ERIE ELEVATOR," BUFFALO, N. Y.

NEW YORK. LAKE ERIE & WESTERN "ERIE ELEVATOR."

BUFFALO, N. Y.

From a photograph taken March, 1887.

By A. Simpson, Buffalo, N. Y.

Capacity, 700,000 bushels.

Architects and Contractors, J. T. Moulton & Son, Chicago, Ill.

Our contract on this elevator was for the entire outside covering of roofs and sides, and was put on by us in the spring of 1883.

The amount of material used was

| | | | | |
|--------|-------------|--------|-----------------|----------------------------|
| 75,000 | square feet | No. 24 | Corrugated Iron | Siding. |
| 25,000 | " | " | Tin | Roofing. |
| 22,000 | " | " | " | Siding. |
| 2,155 | lineal | " | No. 24 | Iron Cornice. |
| 3,500 | " | " | No. 24 | " Door and Window Casings. |
| 550 | " | " | No. 24 | " Water Table. |
| 580 | " | " | No. 24 | " Iron Base. |

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ERRATA.

- Page 10. Third line from bottom, for 24 by 96, read 25 by 96.
- Page 12. Third line from bottom, for 20, 21 and 22, read 20 and 22.
- Page 14. Second line from top, for Fig. 5 read Fig. 23.
- Page 14. Third line from bottom, for 20, 21 and 22, read 20 and 22.
- Page 34. Second line from bottom, for $1\frac{1}{2}$ pounds read 1 pound.
- Page 49. First line on top, for Fig. 36 read Fig. 55.

